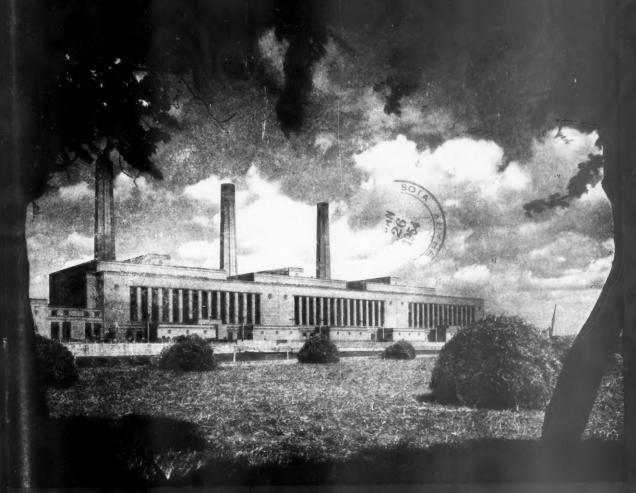
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DECEMBER 1953

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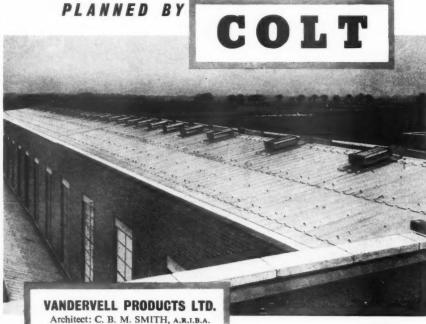
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DECEMBER 1953

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Honorary Membership

The Right Hon. The Earl of Halifax, K.G., O.M., G.C.S.I., G.C.I.E., Hon. R.A., has accepted the nomination of the Council to the Honorary Fellowship.

Professor J. F. Baker, O.B.E., D.Sc., M.I.C.E., M.I.Struct.E., Mrs. M. A. Montgomery and Sir Arthur Trueman, K.B.E., F.R.S., have accepted the nomination of the Council to the Honorary Associateship. Professor Baker is Professor of Mechanical Sciences at Cambridge University, was formerly at B.R.S. and during the war in the Research and Experiments Department of the Ministry of Home Security; he is a leading authority on structural design. Mrs. Montgomery is Managing Director of the Building Exhibition and has been for some years a generous supporter of the Architects' Benevolent Society. Sir Arthur Trueman is Chairman of the University Grants Committee and Chairman of the Geological Survey Board.

Canadian Architects and Westminster Abbey

A donation of \$440.03 has been sent by the Royal Architectural Institute of Canada to the Mayor of Westminster's Supporting Fund for the repair of Westminster Abbey. It is the result of collections made by the Provincial Associations of the R.A.I.C.

The Letchworth Dinner

The fiftieth anniversary of the founding of Letchworth, the first garden city, was celebrated by a dinner at the House of Commons on 27 November. It was a gathering of those architects, surveyors, engineers and planners who are the leaders in town planning and the creation of new towns. It had been arranged jointly by six bodies, including the R.I.B.A. The President, Mr. Howard Robertson, M.C., A.R.A., S.A.D.G., was present.

Viscount Samuel [Hon. F], who occupied the chair, said that town planning was one of the most important factors in 20th-century civilisation. As a boy he had lived at Toynbee Hall and seen the conditions then existing in Whitechapel. It was to our credit that we had taken the lead in abolishing such conditions; our fourteen new towns were now a model for the whole world. Ebenezer Howard had had the great idea that the increases in land values in an urban locality should go, not to landlords nor to the state, but to the local people who live on the spot.

The other speakers were Lord Salter, Mr. Arthur Greenwood, M.P., Sir Patrick Abercrombie (who recalled the great contribution made by Barry Parker and Raymond Unwin), Sir Fric Macfadyen and Mr. F. J. Osborn.

R.I.B.A. Activities in the New Year

The first Sessional Paper in the New Year is to be delivered by Mr. John Betjeman on 5 January. Poet, scholar, critic and broadcaster, Mr. Betjeman has a wide knowledge of architecture and an appreciation of its place in civilisation. The title of his paper is *Honour Your Forbears*. The Council's Award of Prizes and Studentships will be announced at this meeting.

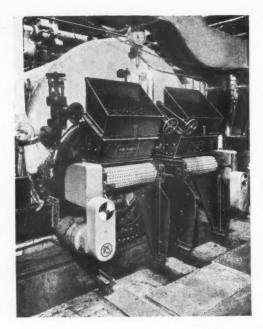
On 19 January Mr. H. F. Broughton is to give the first science lecture of the session on *Economy in Building*. The title of this lecture had been announced as *Building Economics and Builders' Plant*, but Mr. Broughton has changed it to avoid the possible misconception that he is to talk mainly about mechanical plant, whereas he intends to discuss the whole question of building efficiency in which mechanical plant is an aid. Mr. Broughton has 40 years' experience of the building industry, particularly of house building, and is now in charge of the section at B.R.S. which is studying building operations.

On 2 February the President will deliver his Address to Students and present the prizes. The criticism of work submitted in the various competitions will be given by Mr. Basil Spence, O.B.E., A.R.A., A.R.S.A. [F].

Bicentenary of the Royal Society of Arts

It was on 22 March 1754 that eleven men met and founded the 'Society for the Encouragement of Arts, Manufactures and Commerce in Great Britain'. The first subscription book contains the names of Robert Walpole, Joshua Reynolds, Clive, Rodney, John Howard and Samuel Johnson. For 13 years the Prince Consort was President. From its activities many other societies have sprung, notably the Royal Academy, the Royal Photographic Society, the Royal College of Music and the Chemical Society. Many of the lectures in its charming Georgian hall have made history; in it Marconi made the first public announcement of his inventions, the discovery of penicillin was first described there and the first talking film was screened. As Sir Stephen Tallents [Hon. A] said recently in an article in the DAILY TELEGRAPH, 'Here is a society which has deliberately preserved, in these days of growing specialisation, that feature of increasing rarity among modern societies as among modern individuals a wide outlook on an ever more complicated world'. The Bicentenary Meeting is to be held on 22 March 1954,

As part of its bicentenary celebrations the Society is holding an open competition on the subject of 'Life in A.D. 2000', particulars of which we give on page 80.



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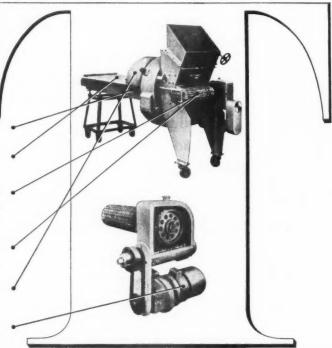
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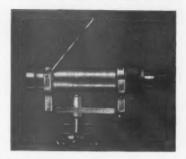
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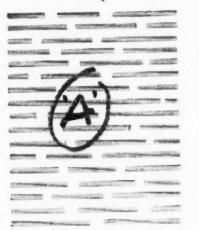
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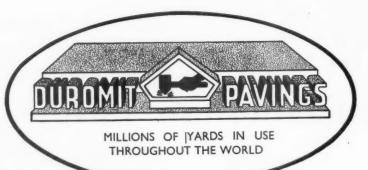
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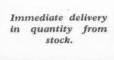
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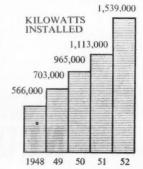
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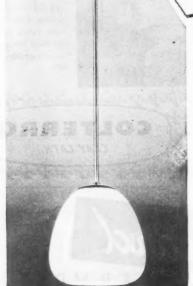


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Building Research Station Digest No. 60

NOVEMBER, 1953

Condensation in Domestic Chimneys

(Superseding Digest No. 5)

The traditional brick construction has provided the most satisfactory form of chimney for many purposes for some hundreds of years and is still accepted as the most trouble-free type. Until the use of the small domestic boiler became widespread in the period between the wars, the brick chimney serving the open fire and other domestic heating appliances gave little trouble. Soon after the introduction of small domestic boilers, however, defects caused by condensation in the flue occurred in many chimneys serving them. Recent surveys have shown that, on some estates, as many as 90 per cent of the houses have been affected. This Digest, a revision of Digest No. 5, published in 1948, describes the symptoms and causes of the defects and gives details of construction that should be adopted in new chimneys, and methods of dealing with existing chimneys that have become defective.

Symptoms

The following defects are typical results of condensation occurring in chimney stacks:—

(a) Staining of external and internal walls and of ceilings adjacent to the stack, often accompanied by a smell.

(b) Distortion and cracking of the brickwork or masonry in the stack.

(c) Cracking and disintegration of renderings, particularly along the horizontal joints of brick built chimneys.

(d) General expansion of the brickwork allowing the chimney-pot to sink inside the stack.

Only one of these defects may occur in a particular stack, but more often two or more are found. It should not be difficult to tell whether the trouble is due to condensation or to some other cause such as natural weathering of chimneys that are built with poor materials, as weathering can be expected to affect all the chimneys in a house.

Causes

The combustion products from most fuels contain materials that can cause trouble, such as sulphur compounds, tar acids, ammonia, and water vapour. These are rarely harmful in domestic chimneys provided that they stay as gases until they pass out of the chimney. usually does happen with open fires. If, for any reason, the water vapour in the gases condenses to liquid water before it can pass out of the chimney it will be deposited on the inner surface of the chimney, carrying with it tarry and other matter from the flue gases. Some of the materials that collect on the sides of the flue have the property of absorbing moisture from the air, and will do so irrespective of whether the boiler fire is burning. When condensation occurs, deterioration is likely to follow. Any sulphates or acids present will attack hydraulic lime or Portland cement in the mortar joints and in the parging, a reaction that is accompanied by considerable expansion and/or disintegration. Frequently, the first sign of attack is the presence of powdered mortar in soot swept from the The moisture absorbed into the brickwork will dissolve the sulphates that are present in many types of bricks, and this may accentuate attack on the mortar. Salts may be carried by moisture to the external face of the brickwork where they crystallize out in dry weather to form an efflorescence. External renderings may be dislodged by expansion of the backing or by the action of the sulphates on the renderings themselves. The condensed moisture may also penetrate to the plaster on the adjoining walls and ceilings, carrying with it a tar-like material that stains and may have an objectionable smell.

Domestic boilers are frequently placed against external walls and this involves relatively long lengths of exposed chimney. This aggravates the condensation trouble, since not only has the long stack a greater chance to become cool and

in turn to cool the flue gases, but it can also absorb the rain falling on it. This water will supplement the moisture that has been absorbed from the condensed flue gases, and will, therefore, increase the liability to sulphate attack.

Precautions recommended for new chimneys
The design of new chimneys should include

three features:-

(a) The use of linings resistant to the attack of the condensate from the flue gases, with means for collecting and removing any condensate formed.

(b) Protection against the entry of excessive amounts of rain.

(c) Increasing the thermal insulation of the chimney stack.

In addition, it is helpful to provide for the admission of extra air to the flue gases.

Use of linings resistant to attack

The use of suitable linings will give positive assurance that if condensation does occur the chimney stack will not be affected.

Salt-glazed earthenware pipes are suitable for the lining, provided that those used in the lower part of the chimney are free from flaws, such as fine cracks, crazing of the glaze, sign of irregular burning, or other defects which may lead to cracking when the pipes are heated and cooled. The pipes must be fitted socket end up, and should be jointed with a material, such as high alumina cement mortar, that is more resistant to attack by the condensate than are Portland cement mortars. Packing the sockets with asbestos cord and flaunching with high alumina cement provides scope for expansion.

There is some difference of opinion as to whether the diameter of the pipe should be 4 in, or 6 in, for the type of installation for which this Digest is mainly concerned, i.e. boilers for domestic hot water, small stoves and insulated cookers. There is little doubt that from the point of view of reducing condensation the 4 in. size is preferable, but many people are reluctant to use less than a 6 in. pipe, fearing that the smaller one would restrict the maximum heating, which could be attained. With straight flues used with appliances in which smokeless fuels are almost exclusively burnt, the 4 in. size is likely to burn the more satisfactorily, but with other fuels large quantities of soot and tar may be formed, and a choice may have to be made between more frequent sweeping or adopting a larger flue pipe despite the greater risk of condensation. It may well be that ease of sweeping is the practical feature that will control the size of the pipe. A larger size than 4 in. is certainly desirable if there are any awkward bends.

When linings are used, proper provision must be made to remove the condensate. Two methods for trapping it are shown in Figure 1, but the method adopted in any particular case will depend on the individual circumstances and the design of the walls in the vicinity of the lower portion of the chimney. The collecting pot should be large enough not to need frequent emptying, but the design can be modified to incorporate a draining pipe. This pipe should not be too narrow, or it may become choked.

In the section dealing with the repair of existing chimneys a method is described whereby only the top part of the chimney is lined. This method may be suitable also for new chimneys, but so far the experience of its use is too limited for it to be recommended for new work.

Protection against rain

Precautions should be taken to keep out rain, partly because wet brickwork will carry heat away quicker than dry brickwork and therefore conduce condensation, and partly because rain penetration may itself cause deterioration. Cappings, flashings and damp-proof courses must, therefore, be adequate. The use of a pre-cast concrete capping with a throating and a generous overhang or projection is recommended. It is also an advantage to arrange for a cover to prevent the direct entry of rain into the chimneypot, since the rain will not be absorbed by the impervious lining. Care may be needed in the design of the cover if trouble is to be avoided. It is preferable not to render a brickwork chimney unless it has been lined, but if it is required to render the chimney, e.g. to match the appearance of the remainder of the house, then the use of dense renderings should be avoided; a more porous 1:1:6 lime/cement/sand rendering would be preferable.

Increasing the thermal insulation

The thermal insulation of a chimney can be increased by building in the impervious lining so that it is separated from the brickwork by an air space or by a material having good insulating properties, for instance, diatomaceous earth or a light-weight concrete, the latter having the advantage of providing good support for the lining. The air space should not be ventilated, but a small aperture should be left at the bottom to form a "breathing hole," and to permit drainage if water enters the cavity.

Loss of heat can also be reduced by siting the stove or appliance in the house so that the flue remains within the house for the greater part of its length. The exposed length of chimney stack may be kept to a minimum by arranging for the stack to emerge from the roof instead of at the

eaves.

Admission of extra air

When an ordinary open fire is burning, a considerable volume of air is drawn up into the flue from the room and this dilution of the flue gases is sufficient to prevent condensation. The same principle can be adopted in the case of slow-

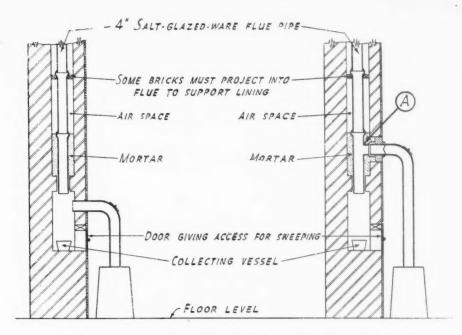


Fig. 1: Two recommended methods of construction of flues with impervious lining.

burning appliances, but the maximum amount of air that can be admitted without spoiling the draught has to be determined by trial in each case.

Loss of chimney draught can be reduced by arranging that the extra air enters some distance up the chimney, so that the lower part of the flue is not cooled. A suitable point of admission is just below the ceiling of the room in which the appliance stands. This position has the advantage of drawing upon the warmest air available. Sometimes an existing external soot door has been used to introduce diluting air; this is undesirable since the air drawn in may be cold and wet.

As a rule the aperture will not be greater than 6 or 8 sq. in., but as draught conditions will vary for each chimney it is wise to use an adjustable grating with a maximum opening of about 15 sq. ins. After trials have been made it can be fixed to the maximum opening that gives a satisfactory draught. The limit will generally be set by the fact that, if it is too large, the fire either will not give a satisfactory rate of combustion or will not keep alight overnight.

Measures recommended for damaged chimneys In the past many defective chimneys have been "repaired" simply by rebuilding the exposed part of the stack. This by itself will not provide a cure and sooner or later, often within 3 or 4 years, the repaired chimney will again become defective. As far as possible, the recommendations made for new chimneys, including the admission of extra air, should be applied when repairing existing ones, but it may not be possible to carry these out fully. It may sometimes be possible to line the chimney throughout its length, but in most buildings this would involve too much demolition. An alternative method, which has been used by some builders, is to insert a single length of asbestos cement pipe in the exposed part of the stack, so that it reaches just below the junction of the stack with the roof. The lower end of the pipe is fixed and made good by any convenient method that will not interfere with sweeping and the upper part finished off with a chimney pot, etc. in the normal way. asbestos cement is unlikely to get hot enough to be affected by the heat unless there is a chimney fire. This method not only stops the condensate from being deposited on the brickwork but also appears to improve the thermal insulation and thus materially to reduce the amount of condensate.

Methods of dealing with stained plaster Where condensate has penetrated through the fabric of a chimney and caused discoloration of adjoining plaster, replastering direct on the wall should not be attempted until further condensation has been prevented. Reliance cannot be placed on sealing and waterproofing compounds, special plasters or paints as a means of protecting fresh decoration.

The most satisfactory way is to remove all contaminated brick, masonry, etc., but if the wall has been thoroughly dried out, and steps have been taken to keep it dry, the following treatment of the stained plaster may prevent further

 Apply two coats of a sealer such as shellac or knotting or aluminium paint.

(2) Apply a heavy lining paper followed by a coat of glue size.

Where there is a possibility that some residual dampness may persist it is preferable to apply a layer of lead or aluminium foil with an adhesive made from red lead and gold size.

This is a further method which will give a high degree of security against damage to decorations and which may be used where the extra cost is considered justified in order to obtain a pleasing appearance in the room immediately, without waiting for the completion of the drying-out process. The principle is to prepare a fresh surface separated by an inch or two from the plaster. This separation between the new surface and the wall may be effected by battens. Suitable means must, of course, be taken to prevent penetration of the moisture through them to the fresh decorations, for instance, by inserting metal distance pieces at the points where they

are fixed to the wall, or by using counterbattens separated from the main ones at their intersection by small pieces of lead or aluminium foil. All wood used should be treated with a non-staining preservative. A lining of wallboards, or lath or mesh for plastering may then be fixed. The cavity left should be well ventilated at the top and bottom so that the wall behind will dry out. The upper outlet may discharge into the loft, especially if there is an objectionable smell. The method of fitting must, of course, conform to the by-laws.

Another method is to use plasterboard that has aluminium foil covering one face. The board should be fixed so that the aluminium face is in contact with the wall. This method obviates some of the difficulties that occur with the battening out method, particularly since it does not involve so much work in fixing.

Fuels

It is important to store fuels in a dry place otherwise serious amounts of water vapour will be consistently fed into the flue gases.

Steam is also formed during the burning of the fuel. Of the three usual fuels, bituminous coal is the worse in this respect, anthracite next and coke best.

It is a common practice to burn wet rubbish, potato peel, tea leaves, hedge clippings, green wood, etc. in domestic boilers, but these materials introduce more moisture and this practice is not recommended, particularly if there are signs of trouble in the stack.

(Prepared by the Building Research Station, Garston, Watford, Herts).

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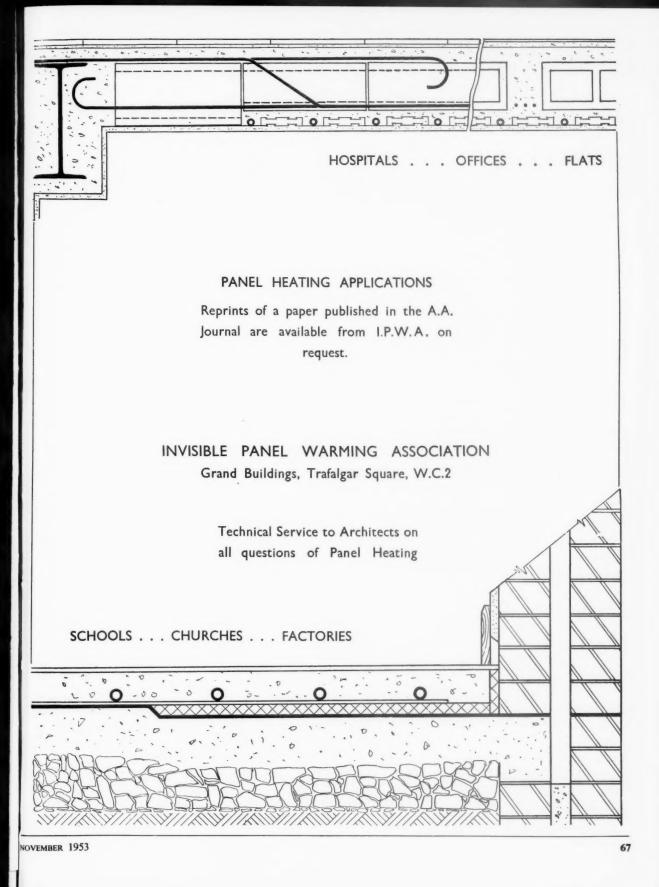
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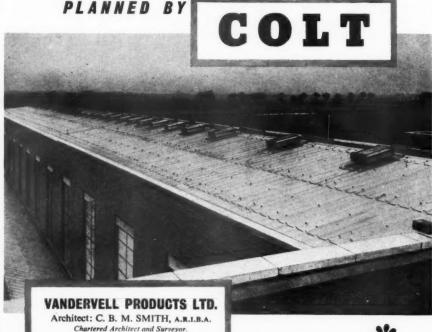
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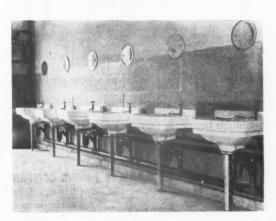


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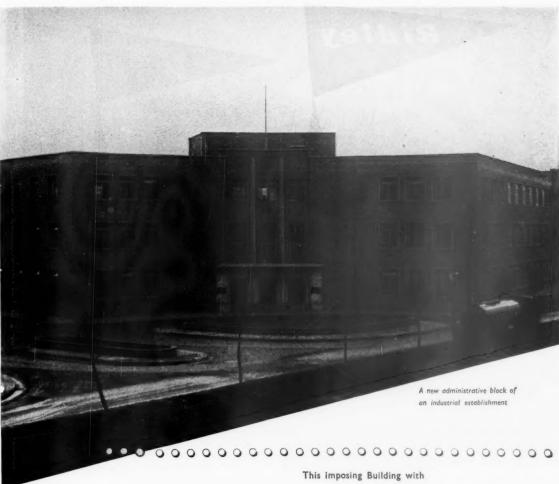
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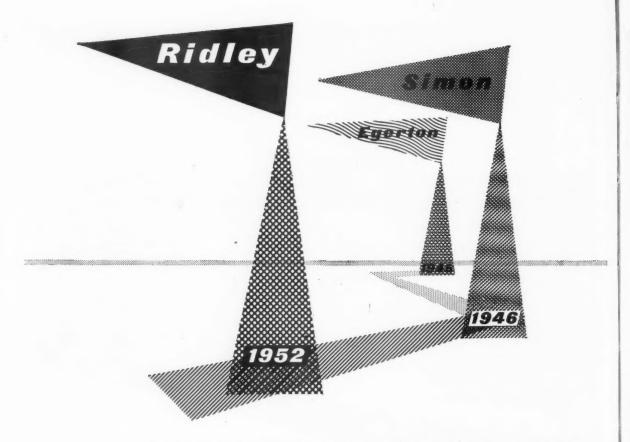
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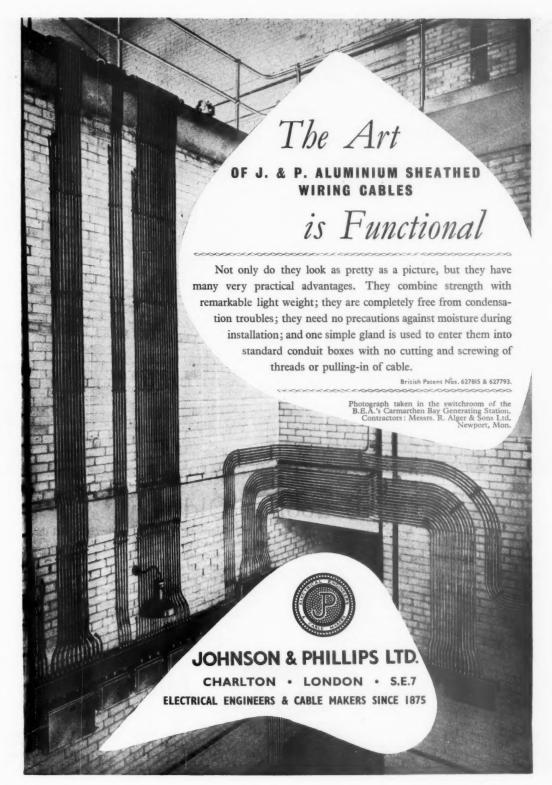
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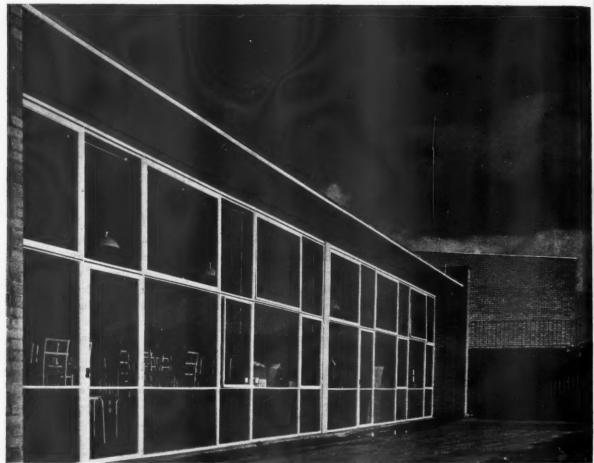
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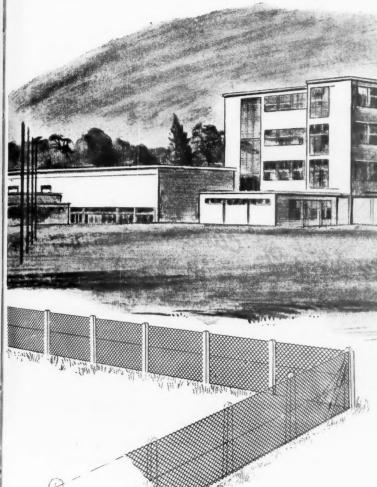
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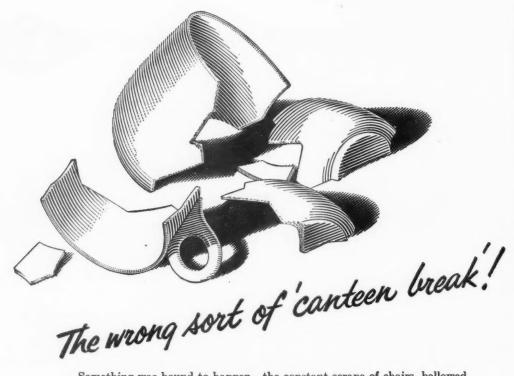
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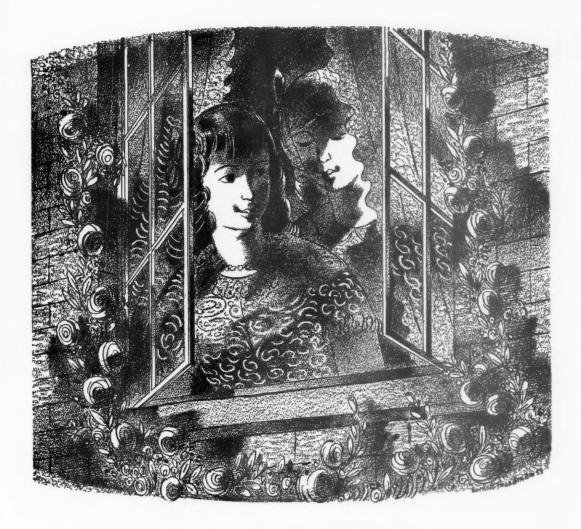
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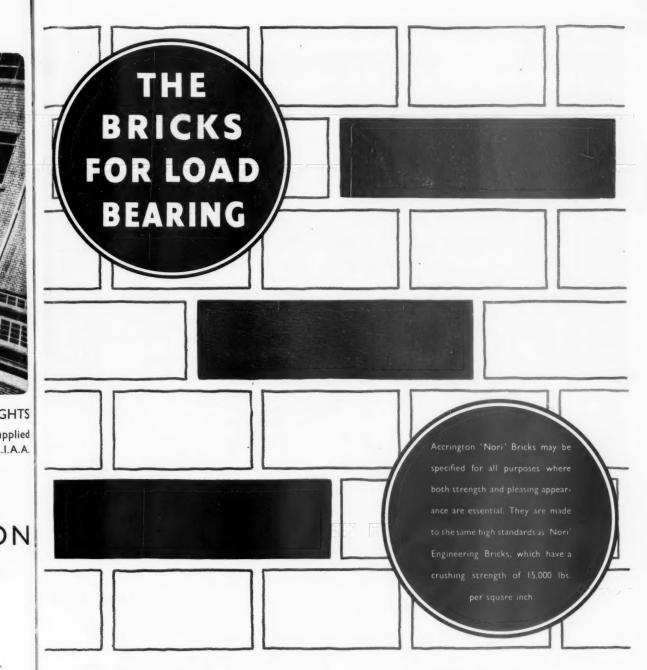
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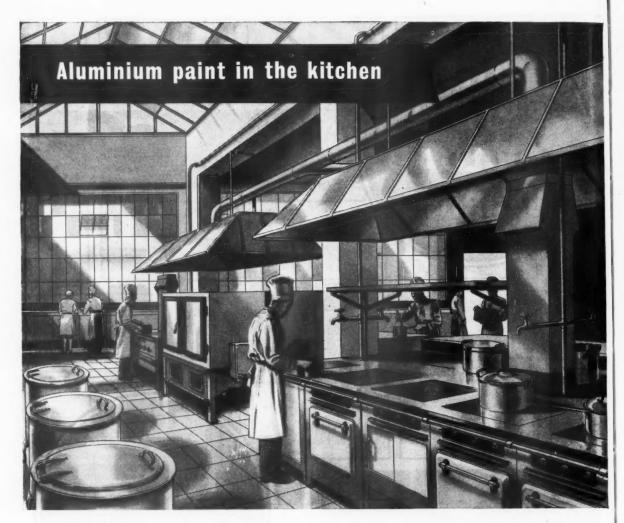
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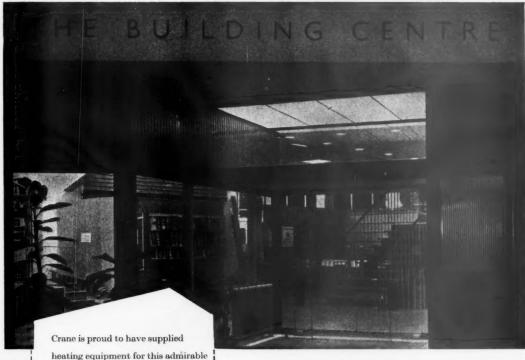
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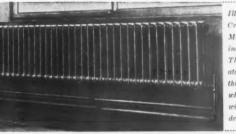
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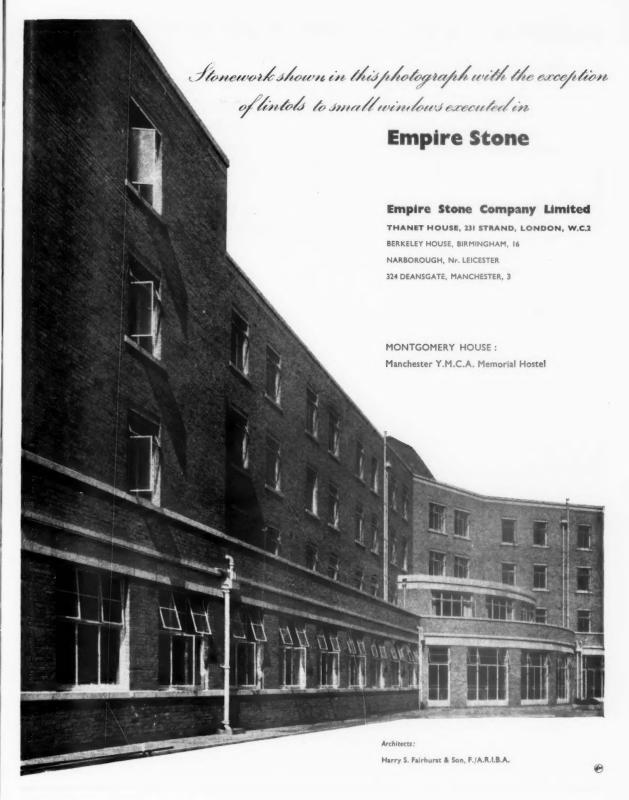


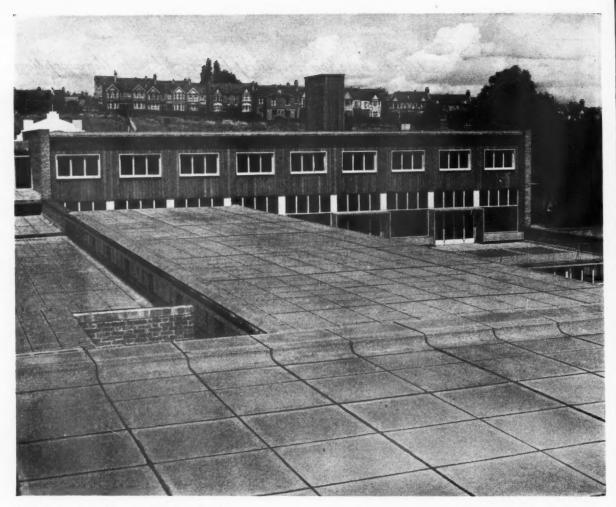
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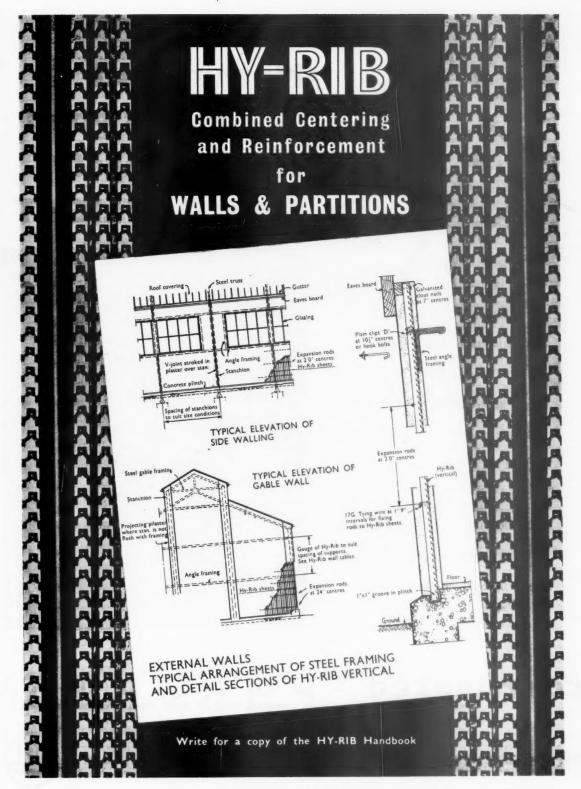
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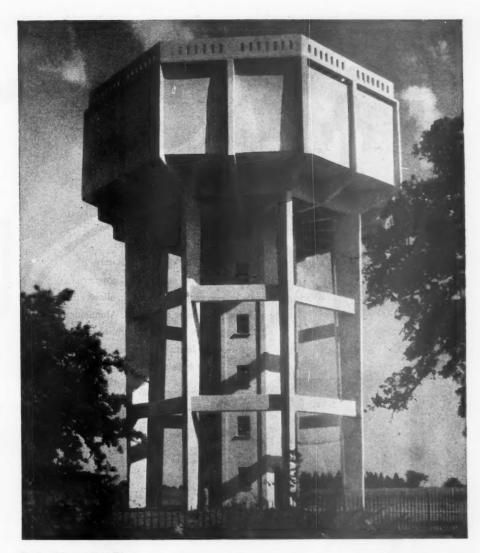
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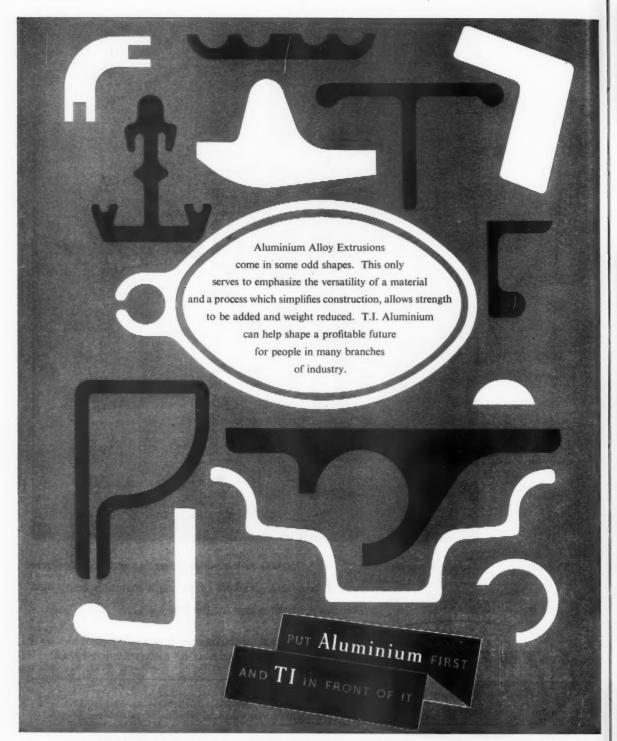
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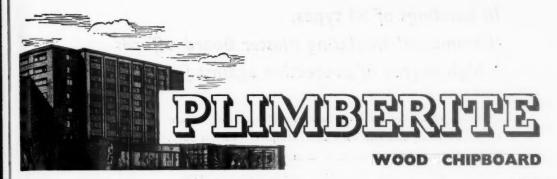
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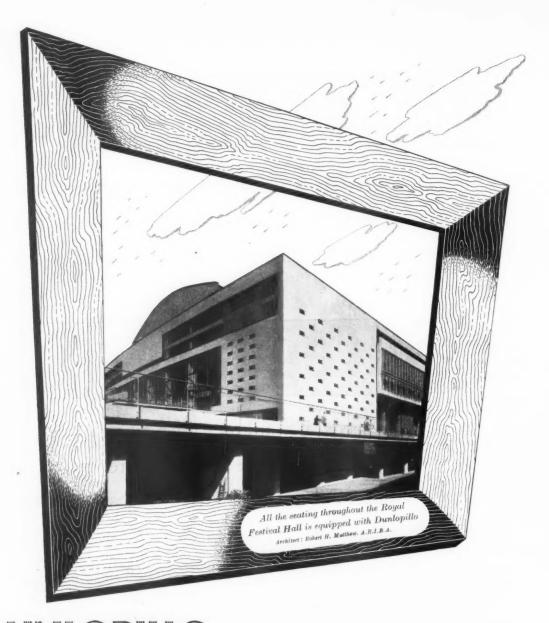
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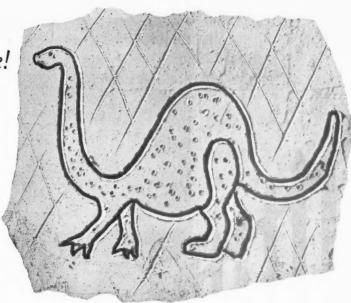
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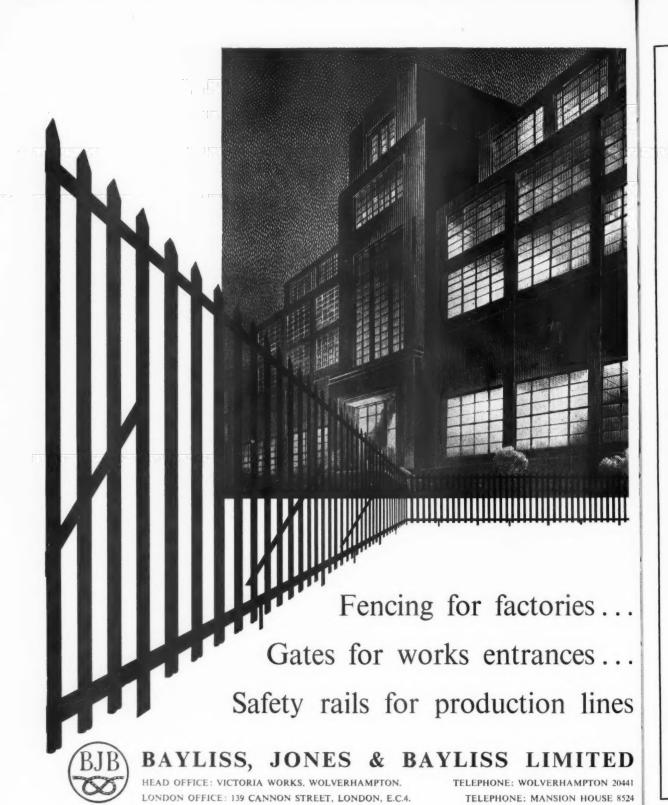
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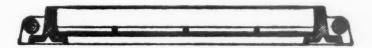
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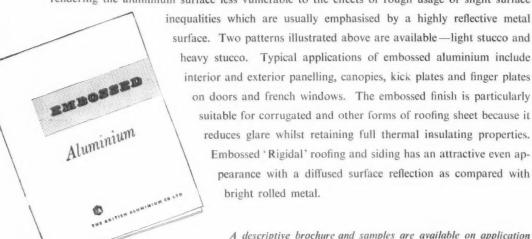
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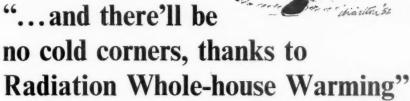


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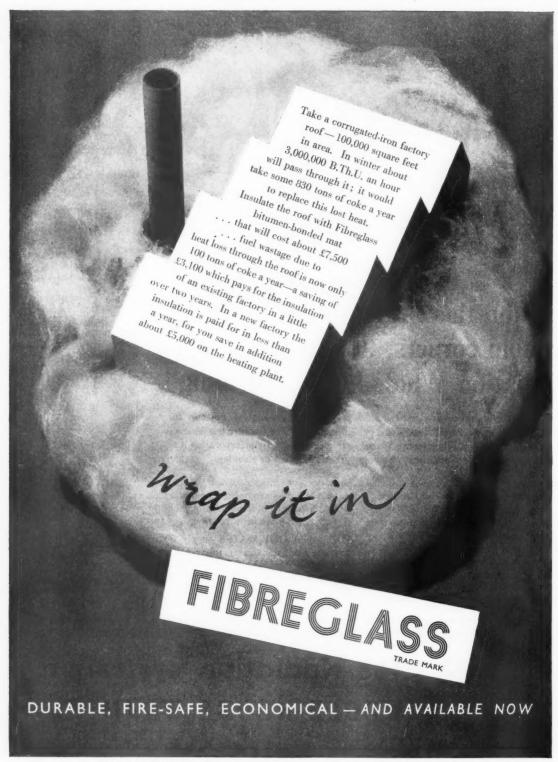
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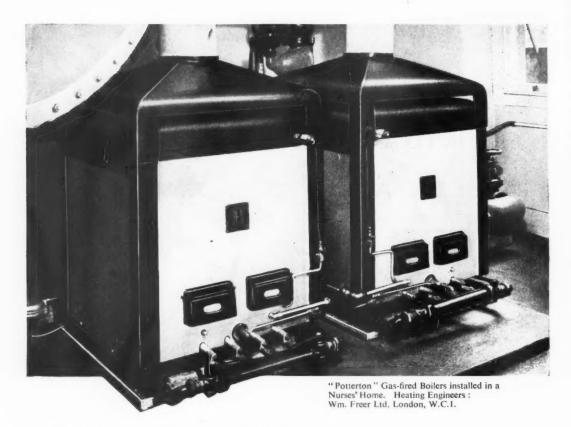
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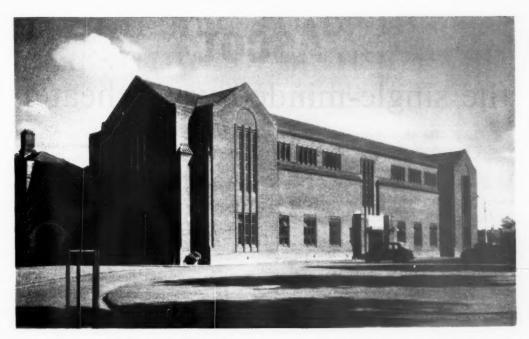
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THE JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

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TWO SHILLINGS AND SIXPENCE TELEGRAMS: RIBAZO WESDO LONDON

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Honorary Membership

The Right Hon. The Earl of Halifax, K.G., O.M., G.C.S.I., G.C.I.E., Hon. R.A., has accepted the nomination of the Council to the Honorary Fellowship.

Professor J. F. Baker, O.B.E., D.Sc., M.I.C.E., M.I.Struct.E., Mrs. M. A. Montgomery and Sir Arthur Trueman, K.B.E., F.R.S., have accepted the nomination of the Council to the Honorary Associateship. Professor Baker is Professor of Mechanical Sciences at Cambridge University, was formerly at B.R.S. and during the war in the Research and Experiments Department of the Ministry of Home Security; he is a leading authority on structural design. Mrs. Montgomery is Managing Director of the Building Exhibition and has been for some years a generous supporter of the Architects' Benevolent Society. Sir Arthur Trueman, is Chairman of the University Grants Committee and Chairman of the Geological Survey Board.

Canadian Architects and Westminster Abbey

A donation of \$440.03 has been sent by the Royal Architectural Institute of Canada to the Mayor of Westminster's Supporting Fund for the repair of Westminster Abbey. It is the result of collections made by the Provincial Associations of the R.A.I.C.

The Letchworth Dinner

The fiftieth anniversary of the founding of Letchworth, the first garden city, was celebrated by a dinner at the House of Commons on 27 November. It was a gathering of those architects, surveyors, engineers and planners who are the leaders in town planning and the creation of new towns. It had been arranged jointly by six bodies, including the R.I.B.A. The President, Mr. Howard Robertson, M.C., A.R.A., S.A.D.G., was present.

Viscount Samuel [Hon. F], who occupied the chair, said that town planning was one of the most important factors in 20th-century civilisation. As a boy he had lived at Toynbee Hall and seen the conditions then existing in Whitechapel. It was to our credit that we had taken the lead in abolishing such conditions; our fourteen new towns were now a model for the whole world. Ebenezer Howard had had the great idea that the increases in land values in an urban locality should go, not to landlords nor to the state, but to the local people who live on the spot.

The other speakers were Lord Salter, Mr. Arthur Greenwood, M.P., Sir Patrick Abercrombie (who recalled the great contribution made by Barry Parker and Raymond Unwin), Sir Eric Macfadyen and Mr. F. J. Osborn.

R.I.B.A. Activities in the New Year

The first Sessional Paper in the New Year is to be delivered by Mr. John Betjeman on 5 January. Poet, scholar, critic and broadcaster, Mr. Betjeman has a wide knowledge of architecture and an appreciation of its place in civilisation. The title of his paper is *Honour Your Forbears*. The Council's Award of Prizes and Studentships will be announced at this meeting.

On 19 January Mr. H. F. Broughton is to give the first science lecture of the session on *Economy in Building*. The title of this lecture had been announced as *Building Economics and Builders' Plant*, but Mr. Broughton has changed it to avoid the possible misconception that he is to talk mainly about mechanical plant, whereas he intends to discuss the whole question of building efficiency in which mechanical plant is an aid. Mr. Broughton has 40 years' experience of the building industry, particularly of house building, and is now in charge of the section at B.R.S. which is studying building operations.

On 2 February the President will deliver his Address to Students and present the prizes. The criticism of work submitted in the various competitions will be given by Mr. Basil Spence, O.B.E., A.R.A., A.R.S.A. [F].

Bicentenary of the Royal Society of Arts

It was on 22 March 1754 that eleven men met and founded the 'Society for the Encouragement of Arts, Manufactures and Commerce in Great Britain'. The first subscription book contains the names of Robert Walpole, Joshua Reynolds, Clive, Rodney. John Howard and Samuel Johnson. For 13 years the Prince Consort was President. From its activities many other societies have sprung, notably the Royal Academy, the Royal Photographic Society, the Royal College of Music and the Chemical Society. Many of the lectures in its charming Georgian hall have made history; in it Marconi made the first public announcement of his inventions, the discovery of penicillin was first described there and the first talking film was screened. As Sir Stephen Tallents [Hon, A] said recently in an article in the DAILY TELEGRAPH, 'Here is a society which has deliberately preserved, in these days of growing specialisation, that feature of increasing rarity among modern societies as among modern individuals—a wide outlook on an ever more complicated world'. The Bicentenary Meeting is to be held on 22 March 1954.

As part of its bicentenary celebrations the Society is holding an open competition on the subject of 'Life in A.D. 2000', particulars of which we give on page 80.

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Honour for Architect

The Hon. Humphrey Pakington, O.B.E. [Ret. F], has been made Deputy Lieutenant of the County of Worcestershire.

The A.B.S. Ball

The Dorchester ballroom was filled to capacity by the largest assembly of architects and their friends ever gathered together to support the Architects' Benevolent Society. As we go to press we learn that the profit, in aid of the Centenary Appeal Fund for Old People's Homes, may exceed £1,500. This is slightly smaller than last year's figure, which was enhanced by several generous donations.

We also learn that the hitch over planning permission which has delayed announcement of the acquisition of a site for the Old People's Homes has been overcome and that an official statement about starting the project is to come shortly. The profit from this year's ball brings the total so far subscribed to the Appeal Fund to £14,500, which sum is still a considerable way short of the target of £50,000.

The ball is organised by a committee which works on an entirely voluntary basis, and it works very hard-much harder than is realised by those who take the smoothly running organisation for granted and bask in the friendly, cheerful party atmosphere. Mrs. A. H. Wolfe [A], the Honorary Organiser, and Mr. C. J. Epril [F], Chairman of the Ball Committee, deserve the special thanks of the profession for their efforts which are spread over many months. It is not too much to say that the success of the ball was primarily a result of their organising ability and untiring care for detail. Most of the many other voluntary helpers must remain anonymous, but mention should be made of the parties of students from the Architectural Association, Bartlett, Regent Polytechnic and Hammersmith schools of architecture who designed, built and operated the money-making sideshows as well as designing and making the delightful 'architectural' table decorations. Also not to be overlooked is Mr. Eric Ambrose [F], who designed, produced and obtained the advertisements for the elaborate programme. Finally, there is Miss B. N. Solly, the Secretary of the A.B.S., whose work in connection with the ball-and, this year, the A.B.S. stand at the Building Exhibition-is all extra to her normal task of caring for the Society's dependants and beneficiaries.

The A.B.S. Ball has now become a fixed star event in the annual calendar. Each year it has become larger, so much so that this year tickets were all sold a fortnight before the event. It looks as if a bigger room must soon be found. Wherever the 1954 ball is held, we may expect the architect's drawings for the scheme for the Old People's Homes to be on view at it. There are rumours

of a competition for the design.

Also, in case you have overlooked it, the President's Christmas 'Crown' appeal for the ordinary funds of the A.B.S. is still open.

Historic Buildings Council for Scotland

The Minister of Works and the Secretary of State for Scotland have now appointed the Historic Buildings Council for Scotland. The Chairman is the Earl of Dundee and the membership includes Mr. Ian G. Lindsay, A.R.S.A. [F], and Professor R. H. Matthew, C.B.E. [A].

The Architecture Club

A supper of the Architecture Club was held at Chez Auguste, Soho, on Wednesday 18 November, followed by a debate on the proposition 'that the New Towns are a Failure'. Viscount Esher [Hon. F] presided. The debate was opened by Mr. Leo De Syllas [A] and Mr. Frederick Gibberd [F] and was continued by Sir David Eccles, Minister of Works, Mr. W. G. Fiske, Mr. H. W. Wells, Mr. G. A. Jellicoe [F], Dr. Thomas Sharp [L], Col. H. P. Cart de Lafontaine [F], Mr. Ralph Tubbs, O.B.E. [F], Mr. Gontran Goulden [A], Mr. W. E. Adams, Mr. E. R. L. North, Mr. Peter Shepheard [A] and Sir Hugh Casson [F].

Sheffield Competition Designs at the R.I.B.A.

The designs placed first, second and third in the recent competition for Sheffield University layout and buildings will be on view at the R.I.B.A. from 8 to 20 January inclusive.

A.A. Evening Classes in Design

The Architectural Association are to hold evening classes in design for students who have passed the Intermediate Examination and are not attending a school of architecture. There will be no fees and staffing will be on an honorary basis. Since the first announcement was made we understand that about fifty enquiries have been received and that no more can be accepted after 1 January. Particulars are given on page 80.

The Wilts and Dorset Society Exhibition

The exhibition of the work of local architects staged by the Wilts and Dorset Society of Architects is having a good tour. In Dorchester the exhibition was opened by the Mayor and 919 people saw it, a number which seems likely to be exceeded in Salisbury. It is also to be shown in Swindon. This enterprising effort deserves success. It is an excellent piece of local publicity of a kind which Allied Societies can well do to supplement the work on a national scale of the R.I.B.A. Public Relations Committee.

The 'Home and Surroundings' Exhibition

The first copy is to be on view at Upminster in Messrs. Roomes Stores, 45 Station Road, from 31 December to 13 January. It then goes to Grimsby where it will be shown at the shop of Guy and Smith from 18 January to 4 February.

The second copy will be shown at Norwich in the Stuart Hall from 1 to 16 January and at Cambridge at the Eastern Gas Board Showrooms, 52 Sydney Street, from 21 January to 3 February.

The York Summer Schools

The 1954 programme of the York Summer Schools, which continue to grow in scope and popularity, has been increased this year to six courses. Organised by the York Civic Trust, operating as 'The York Institute of Architectural Study' and held at St. Anthony's Hall, York, the courses are on the following subjects and dates: General Course, 22 March to 3 April, on protection and repair work of historic buildings; Specialised Course on the Care of Churches, 6 to 13 April; Specialised Course on Timberwork and Roof Repairs, 13 to 18 September; Summer School for Architectural Students, 31 July to 14 August (measured drawings, sketches and lectures); Summer School on the History of English Architecture, 14 to 26 August (primarily for laymen); Course on Public Park and Garden Design, 6 to 11 September.

The courses are under the supervision of the Director, Dr. W. A. Singleton, M.A., B.Arch., F.S.A., A.M.T.P.I. [A], who seems to have a flair for obtaining lecturers who are the leading experts in their subjects. The school, which sets out to teach subjects which are not sufficiently provided for elsewhere, has been expanding its scope steadily during recent years and courses are customarily fully booked some time before they start. Early application to the

Secretary, St. Anthony's Hall, York, is desirable.

R.I.B.A. Diary

TUESDAY 5 JANUARY, 6 P.M. General Meeting. Announcement of Award of Prizes and Studentships. Honour Your Forbears-John Betieman.

WEDNESDAY 6 JANUARY-TUESDAY 2 FEBRUARY. Exhibition of prizewinning drawings. Mondays-Fridays 10-7: Saturdays 10-5.

FRIDAY 8 JANUARY-WEDNESDAY 20 JANUARY. Exhibition of premiated designs in University of Sheffield architectural competition. Mondays-Fridays 10-7: Saturdays 10-5.

MONDAY 11 JANUARY, 6 P.M. Library Group meeting. Identification of unknown drawings possessed by the Library.

TUESDAY 19 JANUARY. 6 P.M. Science Lecture. Economy in Building -H. F. Broughton.

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The Architecture of the Power Station

By A. Trystan Edwards, M.A. (Oxon), M.T.P.I. [F]

DURING RECENT MONTHS the architecture of electric power stations has become a highly controversial subject, so controversial, in fact, that the protagonists of the two main schools of opinion with regard to it show signs of becoming rather angry with one another. As intellectual heat is reputed to be inimical to intellectual light, in the following article I shall deal with the issues involved as dispassionately as I can and shall try to do justice to the arguments advanced on either side. Not that I claim to be entirely impartial, for that would be an inhuman characteristic, and as I have a certain strong prejudice in this matter, I might as well confess to it at once. I have a prejudice in favour of power stations being designed by architects, and as I have never designed a power station myself and am not likely to be asked to do so, my view of the matter may be described as wholly disinterested.

Elderly readers of the R.I.B.A. JOURNAL, such as myself, will remember the time when power stations were not designed by architects, and perhaps it is relevant to inquire how it has come about that today on nearly every new power station an architect or architectural consultant is employed with the express object of ensuring that in these tremendous undertakings in which engineering considerations must necessarily be paramount, architectural values are not neglected. If it be asked what agency has been chiefly responsible for encouraging power station design to take its rightful place in the world of architecture, the answer must surely be that this enlightened patron of our art is none other than the British Electricity Authority. It is true that this policy was not entirely original because in the case of a few, but very few, electrical supply undertakings initiated before Vesting Day, architects were employed to design power stations as civil buildings of note in conformity with the object of preserving municipal amenities, but after vesting, what was previously an exception became the general rule, and not only does the British Electricity Authority give important commissions to members of our profession but submits all designs for new power stations to the Royal Fine Art Commission for comment and advice before they are approved. Some of the schemes which were inherited by the Authority and carried out by it after Vesting Day have been described as too grandiose and they certainly fail to express the present mood of post-war austerity, while examples of a later date also have

incurred the displeasure of the type of

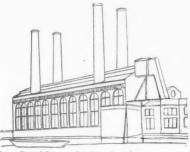
critic of whom it may be said, if one dares to parody Wordsworth's beautiful poem, that

> 'A station by a river's brim A power station is to him And it is nothing more.'

But although the British Electricity Authority has sponsored some great schemes of a 'traditional' character such as the station at Staythorpe, Lincolnshire, here illustrated,1 which has recently, and very appropriately in my opinion, been awarded the R.I.B.A. Bronze Medal, and other schemes of similar type which will be mentioned, it would be untrue to say that the Authority is wedded to a 'conservative' view of architectural style. It has progressively introduced functional design into power station building construction and has made extended use of new materials, also employed functionally. This trend is shown in the design of power stations at Castle Donnington where the upper part is clad with asbestos sheeting, at Marchwood on Southampton Water which has walls of aluminium and glass, and at Willington where the plant will be largely exposed. These latter two examples are also here illustrated and an attempt will be made to do full justice to the point of view which is expressed in their design.

Let us consider some of the more 'traditional' types of design first. There is no doubt that some of these power stations are quite remarkably grand and I believe that their architectural prestige will endure because they have something in common with a former series of grand buildings which were also, in a sense, power stations, though of a different kind. I refer to Vanbrugh's noble palaces built as residences for representatives of the 'ruling class' at the beginning of the 18th century. These houses were 'stations' of political power, places where governmental policies and decrees were often formulated. If they had the monumentality sometimes associated with public buildings, this was in part justified inasmuch as they were the scene of social gatherings of public importance. When we think of Blenheim Palace, Castle Howard, Grimthorpe, Seaton Delaval, and Kingsweston, we picture a set of buildings which are all of a family and are expressive of a similar degree of splendour. Worthy to be compared with these examples in respect of their superior architectural quality, may we not cite some of the great power stations such as Staythorpe, Carrington, Battersea, Croydon B, Rye House, Bankside Keadby and Skelton Grange.

1 See cover picture.-ED.



Lots Road Power Station, London.

—From a sketch

These buildings are also, in their way, architectural aristocrats; they are subject to what may be described as a class convention, they show a respect for formality, they are undoubtedly impressive. Who can deny that they have raised the status of industrial building in this country and represent an important extension of the domain of architecture? 'But it is the wrong kind of architecture' some critics are saying.

Before commenting upon such an assertion it may be well to take a glance backwards and consider the standard of design which was represented in power stations erected, say, thirty years ago. Many of these stations are still in use and, on the average, they are shoddy buildings, strictly utilitarian, constructed as cheaply as possible and making not the slightest pretence to architectural distinction. Yet even at this early date the designers of power stations were beginning to show evidence of an aesthetic conscience. Thus I make no apology for introducing as the first of the illustrations accompanying the present article a pen drawing (traced from a photograph) of the Lots Road Power Station, which drawing appeared in the JOURNAL of the Institution of Structural Engineers in 1927. At the time of its erection this building excited a good deal of favourable attention and it came to be known to the inhabitants of the surrounding district almost affectionately as The Four Sisters'

The geometrical arrangement of the stacks is the principal evidence of design, that is to say, architectural design, in the Lots Road Power Station, although of course a certain degree of orderliness is expressed in the fact that the building is based on a rectangular plan which uniformly overlaps the rectangle indicated by the stacks. Here, however, one may point out a certain crudeness in the design of the building which seems to show that the effort of arranging the stacks in a geometrical pattern had almost exhausted the engineers' capacity to imbue the building with an aesthetic attribute. It was not sufficient to give the stacks a certain consciousness of each other's presence by putting them at the corners of a square, for having begun to give the building an organic quality, they might very well have made an attempt to relate these stacks to the building below them in such fashion that

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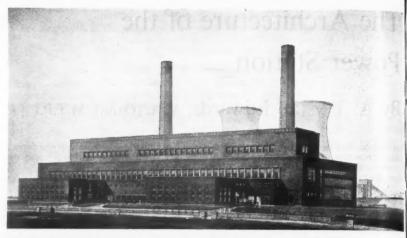
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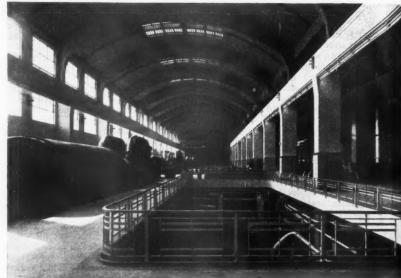
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the façade prepares one for the presence of the tall vertical features by which they are surmounted. This degree of sensitiveness on the part of the façades is entirely absent, for one might take away the stacks altogether and the main block of the building would still be a complete unity by itself. This means, of course, that an aesthetic relationship between the stacks and the block has not been established. The building seems to be wrapped round the lower part of the stacks like a blanket, whilst the emergence of the stacks above the block has the characteristic of a complete surprise.

Yet the Lots Road example, with all its faults, is of some historic significance as it may be regarded as the not altogether unworthy ancestor of the noble family of modern power stations, in which important problems of architectural composition, scarcely recognised in the design of this type of building 30 years ago, have been solved with a remarkable degree of success. There can be no question that the first thing to observe in the design of a power station is the manner in which the tall stacks are related to the main body of the building. If a degree of organic unity has been established here, then the composition is on the way to possessing signal merit, but if it has not been established, then the composition is seen to fail in an important respect. Now there are two main methods of solving this particular problem, each of which is exemplified in the series of great power stations erected in this country in recent years. Either the stacks have a tall plinth which has the same vertical dimension as the adjacent boiler house as in Croydon B, Plymouth B and other examples, or else it is similarly associated with the lower office block as in Staythorpe, Skelton Grange, Carrington and other cases.

It might be imagined that as the main component elements of a power station are few in number, comprising as they do a boiler house with one or more tall chimneys, a turbine house, an office block, cooling towers when the station is not situated at the side of a river or estuary, they do not admit of being arranged in compositions having a wide range of architectural expression. Such a supposition invites a double comment. All these stations perform a similar function and therefore an obvious family resemblance between them is natural and commendable. On the other hand, the establishment of a recognisable architectural symbol for a power station has not prevented a pleasing variety in the grouping of its parts. In nearly all cases the elevational treatments of these 'conventional' types of station have been dignified and well composed, and in certain instances the interiors are highly impressive. For instance, at Skelton Grange the turbine hall is of considerable interest both as a work of architecture and of engineering. It is divided into 14 bays, each 31 ft. long, and its main structural members consist of reinforced concrete portal frames supporting a shell concrete roof. In order to give a satisfactory appear-





Skelton Grange Power Station, Leeds. Perspective and interior of the turbine house. Consulting Architect, R. A. H. Livett, O.B.E. [A], City Architect, Leeds

ance to such a long hall, the radius of curvature of the bottom of the main ribs was made the same as the radius of the shell roof so that the various intersections appear parallel when viewed from below. Aesthetically this is very important and the decision shows how desirable it is for architect and engineer to collaborate from the very beginning of the work of design.

These examples are based upon the supposition, now regarded in some quarters as old-fashioned, that architecture is primarily an art of enclosure. In former days it was assumed that every habitable building was surrounded by walls. In my youth it was a not infrequent occurrence that an architectural examination paper would include a request to draw a picture of a building somewhat pedantically described as 'St. Paul's Without the Walls'. It was one of the stock questions. One luckless student, completely baffled by this question, was constrained to write a

pathetic little note to the examiner apologising for the fact that in spite of repeated attempts he was utterly unable to draw a picture of St. Paul's without the walls.

Yet there is a movement afoot nowadays to design power stations without walls. This movement, however, is conceived as being in two stages. In the first place the brick walls, which are considered to contribute to an effect which is too 'monu-mental', are replaced by walls of lighter material. A pleasing example of this treatment is shown at Marchwood, where the building is clad in vertical glazing and aluminium panels. Undoubtedly economy is achieved by such methods, though i must be borne in mind that the economy is not very great as the screen walls of brick do not account for as much as 1 per cent of the total cost of the building of a power station. The case for the screen walls, of whatever material, is that they make possible reposeful architectural composiof good in town

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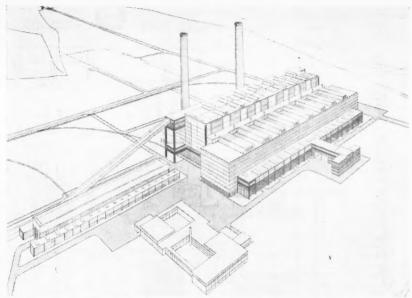
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tions which can accord with the principle of good manners in architecture, whether in town or country.

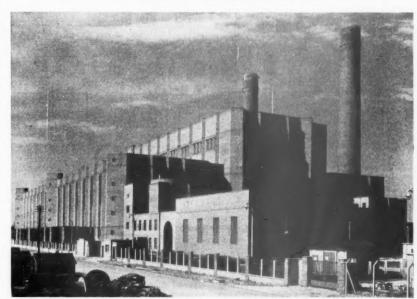
This principle has two main aspects. It is concerned to render unobtrusive what is not of public interest in a building and to give dignified expression in general terms to its main function. The former consideration is not merely architectural in character for it is present in the mind of every engineer when he puts machinery inside a cover, whether it be the engine of a motor-car or the mechanism of a radio set. It is a mistake, therefore, to suppose that only architects wish to enclose the plant of an electric power station within screen walls. Such a policy seems perfectly sensible to most engineers, for they do not harbour the illusion that industrial plant is necessarily beautiful.

There remains the question 'What form should the screen walls assume and, in particular, how should they be fenestrated? Here, of course, the location of the structure is, in part, a determining factor. The design of the Tower Bridge was severely criticised in certain quarters because the machinery which works the opening spans is concealed behind masonry the fenestration of which has a somewhat too domestic expression. In this instance a desire to defer to the near-by Tower of London was the excuse for the treatment adopted. In the case of some of the power stations, however, the complaint is of another kind, namely that the façades are pretentious, and these buildings have been described as 'brick cathedrals', which is intended to be a term of opprobrium. The comparison with a cathedral was perhaps invited by the juxtaposition of the long, rectangular boiler house (a 'nave') and the long, rectangular turbine house (an 'aisle') in such manner that the former has clerestory windows overlooking the latter as is often the case in a church. But this arrangement was not artificially contrived for effect, it was determined by the plan and the relative heights of the items of plant in the adjacent halls. Nor can it be said that the elevation of the design, such as that at Staythorpe, for instance, deserves to be described as pretentious. It is true that the vertical strips of wall separating the tall windows are slightly reminiscent of pilasters, yet the elevations have the appearance of a studied simplicity.

The last example here illustrated is that of Willington, where the plant is almost entirely exposed. The argument in favour of the screen walls has already been briefly stated. Let us now give attention to the arguments which may be advanced against them. The case may be presented in terms such as the following. Hitherto the architectural treatment of power stations has for the most part been confined to the provision of architectural façades to conceal the generating plant. These enclosing shells have usually been in brickwork, with windows and detailing similar to those exemplified in large civic buildings, and with the general aim of producing an appearance of permanence and dignity reminiscent of types of building designed



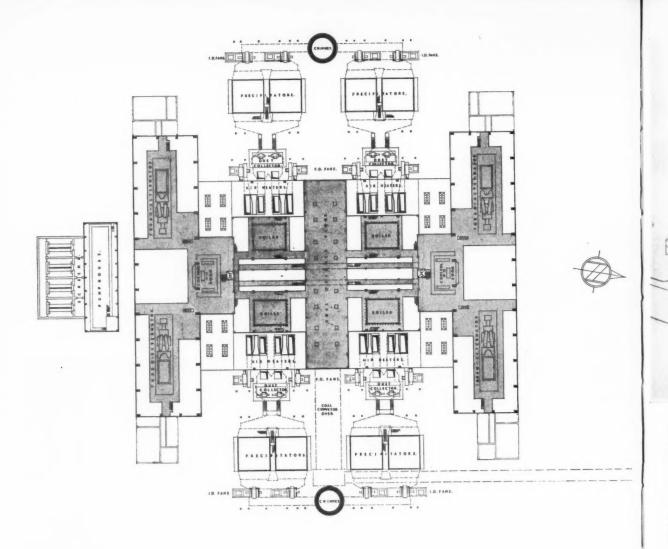
Marchwood Power Station, Southampton. Consulting Architects, Farmer and Dark [FF]



Croydon 'B' Power Station. Consulting Architects, Robert Atkinson [FF]. Photo: Lodge Cotterall Ltd.

to house human activities. It is represented that in using materials and forms commonly associated with the civic buildings to enclose massive engineering plants, both the vitality of form and purpose of the plant is denied its legitimate expression. Also, so it is argued, many objections in principle to exposed plant may be traced to the bad impression produced on restricted industrial sites where makeshift alterations have been carried out without possibility of order or of visual delight.

In the case of Willington 'A' Power Station the 'four square' arrangement of the boilers and turbines produces an orderly composition which would not be appreciated if the boilers had not been left largely exposed. Together with these the economisers, the air heaters, the dust collectors and precipitators, with connecting trunking and fans, and also the transformers, are all left uncovered and provide a variety of forms having strength and purpose which are further accentuated by means of distinctive colour treatment. Standing in contrast to them are the enclosed parts of the station from which the weather must be excluded. This is done as



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The plan of Willington Power Station, near Derby. Consulting Architects, Farmer and Dark [FF]

simply as possible with a light glass and aluminium envelope at high level resting on a brick base. This light shell is intended to reflect the light and shade of the sky, and the repeating curves of the turbine roofs are conceived as a foil to the rectangular forms of the boilers and galleries, and to define the limits of the main composition between the two chimneys. Surrounding this main composition and detached from it the lower office and welfare buildings provide a transition back to human scale at the boundaries of the site.

Such is the most modern type of power station. The architect of this scheme at Willington is a man of questing mind who makes a special study of the relationship between modern architecture and modern movements in painting. The design which he has conceived with the collaboration of

the engineers is intended to be expressive of a symbolism comparable to that suggested by Graham Sutherland's paintings of 'Standing Forms'. Unfortunately in the present context it is not possible to pursue this interesting subject further.

These comments on the architecture of power stations must necessarily include a reference to a publication recently issued by H.M. Stationery Office for the Ministry of Fuel and Power. I refer to the Report of the Committee of Enquiry into Economy in the Construction of Power Stations. This Report contains recommendations which, if carried out, will have the result that the 'grand' types of power station will never again be reproduced and will be superseded by buildings of more economical construction in which cheaper and lighter materials than brick are used

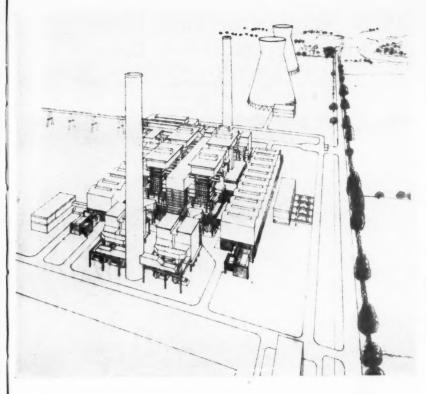
for the walls or else the station is only semiclad. The Report quotes with approval a memorandum issued by the Royal Fine Art Commission on general principles which should govern the design of power stations. In this memorandum there is to be found the following expression of opinion:—

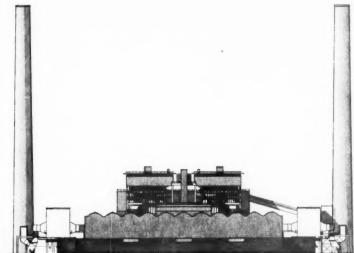
'Designs should be based on clear functional expression both in respect of the uses for which the various elements in the structure are intended and in respect of the form of construction. The temptation to give the larger elements of a power station a heavy monumental character more suited to a place of assembly should be avoided. At the same time the architectural value of these larger elements should not be neglected; but the architectural quality should be developed from the careful articulation

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of the several parts of the building, from their relationships to each other within an overall scheme of proportion, and from good detailing and finishes rather than from forced symmetry or the addition of superfluous features.'

It may be noted with satisfaction that the Fine Art Commission, while objecting to monumentality in this connection, still regards power stations as *buildings*, in which case they are a proper subject for the attention of the architect. But how long will Left: Perspective of Willington Power Station, near Derby. Consulting Architects, Farmer and Dark [FF]

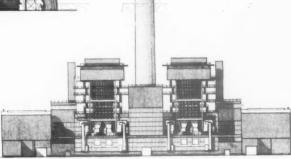
this continue to be so when the convention is fully established that the plant of a power station should be exposed? It has taken a good deal of propaganda extending over thirty years or more to persuade industrialists to employ architects for the design of their buildings despite the fact that, more often than not, a building conceived as a work of architecture will cost just a little more than one which is purely utilitarian. Admittedly engineering plant can be beautiful to look at, but on one condition only, namely that it is designed from the first with the collaboration of an artist. This condition does not at present generally obtain.

Nor can we be sure that the effect of this exposure of the plant will not, in itself, be a monumental one. It will be remembered that the monument to the Unknown Political Prisoner was an affair of pipes and wires. So to the designers of the newest type of 'exposed' power station we are surely entitled to say 'Be a little careful, do not overdo it, and, above all, do not show too many pipes nor too many wires, if you please, for pipes and wires have now become the recognised medium for the expression of monumentality.'

But one thing may be taken for granted, namely that the British Electricity Authority, while paying due regard to the dictates of economy, is willing to encourage a considerable amount of architectural experimentation with the object of ensuring that the power stations still to be erected under its auspices will worthily express their important functions. These new types of station may differ widely from one another, and each will require to be judged upon its own merits.

Left: the south elevation of Willington Power Station.

Below: the east elevation



The Development of a Neighbourhood Unit

Bennetts End and Apsley at Hemel Hempstead New Town

Planned by Judith G. Ledeboer, M.A. [F], in collaboration with H. Kellett Ablett, M.T.P.I. [F], Chief Architect, the Hemel Hempstead Corporation, who, with Booth & Ledeboer [FF], Clifford Culpin and Partner [F|A] and G. A. Jellicoe, M.T.P.I. [F], designed the housing.

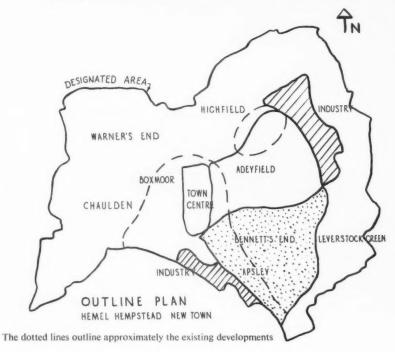
NOT MANY ARCHITECTS have planned and built a complete neighbourhood unit. There are plenty of theorists but few practitioners. The theorists generally assume that one starts with a clear field and no hindrances to creative effort; in practice there are powerful over-riding factors, the site is neither flat nor free from obstacles, and creativeness is confined by policies laid down by others, by the economics of road and sewer construction and, above all, by costs. This article sets out the problems which beset the creation of the second neighbourhood unit of the new town of Hemel Hempstead and describes how they have been solved. Doubtless both problems and solutions are fairly typical.

The boundaries of Bennetts End and Apsley neighbourhood unit were laid down in the master plan, an outline of which is given on this page. The site is a bald shoulder of hill rising 150 ft. from a main road in the bottom of a valley to the south. Existing speculative and local authority housing in Apsley extends some way up the slope from the main road and has had to be incorporated; incidentally, this has been done without demolishing a single house. Here there were fortunately already a chapel, public house, school and some scattered shops, forming a natural focal point for the addition of a group of shops, a filling station, builder's yard, service industry, and the necessary transformer station. The chapel and pub are to be rebuilt on new sites and a hall added.

Three prominent and awkward obstacles presented themselves. The first and most awkward is a derelict lime works with abandoned pits and spoil banks; so far this has defied treatment, but it has been thickly planted with forest trees in preparation for any future scheme of amenities which may be planned. At present it forms an unduly prominent object in air photographs. The second is a local authority sports ground in the centre of the area; this is an amenity rather than an obstacle but it had to be incorporated. The third is an area of woodland on the crest of the hill containing a few scattered houses and some worked-out tile pits. In addition, an area of 33 acres-the only flat portion of the site—had been earmarked for three schools and their playing fields by the Hertfordshire County Council. And finally there is an area at present beyond the range of sewers but which may be developed when the adjoining neighbourhood unit of Leverstock Green comes to be developed. There were only two possible routes for new access roads up the hill from the old town, where are the principal shops and community buildings. One branches off an old road on the west and the other



Air view of Bennetts End and part of Apsley. Bottom left, existing development; middle left, the derelict lime works; centre, playing fields with Bennetts End neighbourhood centre just above



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The north-west side of Bennetts End showing housing designed by Mr. G. A. Jellicoe. The long terrace faces a fine view to the south-west over and between the streets of houses down the hillside



The south-east side of Bennetts End showing housing development by Booth and Ledeboer. A principal road sweeps up to the shopping centre shown under construction at the top left



The long terrace designed by Mr. G. A. Jellicoe. This has three-storey houses at intervals



An open green and houses designed by Booth and Ledeboer



Plan of Bennetts End. There are three main approaches; from the south, west and north meeting at the neighbourhood centre on the summit of slopes in three directions. Housing on the west is mostly by Mr. G. A. Jellicoe, on the south-east by Booth and Ledeboer and north-east of the neighbourhood centre by Clifford Culpin and Partner

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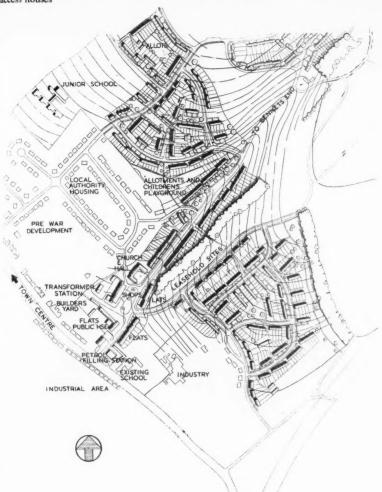
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Housing in Apsley by Mr. H. Kellett Ablett with, on the right, footpath access houses



A group with footpath access by Booth and Ledeboer



Plan of Apsley. An extension of an existing development separated from Bennetts End by open spaces. Much of the Apsley housing is by Mr. H. Kellett Ablett

follows a valley curving up to the crest, though it was with difficulty that road gradients were maintained at one in ten.

All these features have dominated the plan, but there was an obvious site for the neighbourhood centre—on the brow of the hill with magnificent views in all directions. To this centre the two main roads curve up

naturally. From this vantage point the neighbourhood roads radiate, giving access to the existing neighbourhood unit of Adeyfield, to Leverstock Green and to the industrial area. The housing is arranged in interesting groups—mostly with good views—about these roads and approached by various forms of secondary access. A

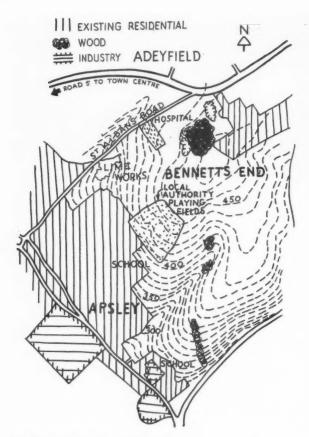
green belt has been planned round Bennetts End and forms part of the open space provision; this absorbs areas where the contours are too steep for building.

The various obstacles and areas already allotted to other uses left a total of 340 acres for housing development. Housing of a mixed character was contemplated and has in general been carried out, though adjustments have taken place in accordance with demand. About 5 per cent consists of flats. The total population of the area will be about 17,000, of whom about 6,500 live in the existing Apsley development. The area would have lost character if it had been developed as one neighbourhood, so it was divided into Bennetts End with 8,750 persons and Apsley with 8,250 persons.

Bennetts End neighbourhood centre, designed by Booth and Ledeboer, consists of a small square with a group of shops enclosing two sides—the north and west—and having arcades into which the sun will shine during the mornings and early afternoons. On the other sides are to be built a church, a community centre and a public house. The community centre, designed by Mr. Ablett, is to be placed between the shopping square and the playing fields. The central group also includes a rather taller block of flats and a three-storey terrace for professional use by doctors, dentists, etc. An old persons' home is to be erected at a later date.

Behind the shops is an enclosed area for service industries and workshops. This also gives lorry access to the back of the shops. At present the use of this area is not precisely known, though it is fairly certain there will be a demand for buildings of this type; they will be conveniently located but unobtrusive.

The Hertfordshire County Council school programme for the whole area required an allocation of about 100 acres between the new and the old schools. Provision for the new schools was made to the east of Bennetts End, one of the most beautiful sites in the county. A grammar school, a secondary modern school and a junior modern and infant school are here grouped to form a school campus. The siting of the schools on the fringe of the neighbourhood forms the transition from housing development through the playing fields into the countryside, and avoids the problems of circumnavigation which a large school site creates if placed centrally. Only one primary school is planned in

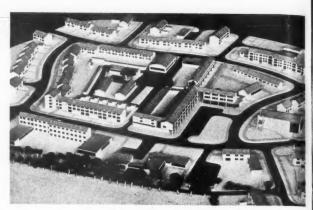


The site as existing before work started

Right: plan and photograph of the model of the neighbourhood centre which is now under construction. The shopping centre faces south and west and is backed by an area for service industry and workshops. Near it is a terrace for doctors, dentists, etc. The social centre is between the shopping square and the playing fields



A terrace with footpath access by Booth and Ledeboer







Houses by Clifford Culpin and Partner

the residential area, a second is sited on the fringe of green belt between the two neighbourhoods.

Densities vary not only in accordance with social requirements but also in relation to the preservation of trees and

to the problem of building on slopes with gradients of one in eight.

In the layout of residential roads one

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Houses by Booth and Ledeboer with footpath access



Staggered houses by G. A. Jellicoe



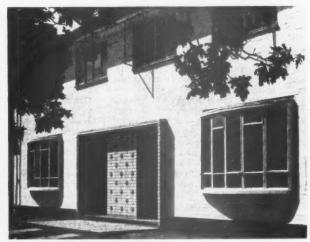
Houses by G. A. Jellicoe



Three-storey houses by G. A. Jellicoe



Houses by H. Kellett Ablett



Houses by Clifford Culpin and Partner

object has been kept in mind, and that is in all cases to create a pattern that will tie each single residence to the whole; in fact to make it possible for each resident to come out of his house and to have direct access to the centre of the neighbourhood without having to make a detour in another direction. This sense of relation to the neighbourhood centre gives unity to the design and direction to the road pattern.

The architects responsible for private enterprise buildings are: The Golden

Cockerel P.H., N. E. Morley [L], Staff Architect of Courage & Co. Ltd.; Church, Dawe, Carter and Partners [AA]; Methodist Church, Houchin, Harrison and Stevens [F/L]; George P.H., J. C. F. James [F]; Garage, W. J. Dacombe and Son [LL].

Architecture at the Cross-roads

By Professor Sir Patrick Abercrombie, M.A.(L'pool), D.Lit., F.S.A., M.T.P.I.

The Presidential Address at the Third Congress, I.U.A., Lisbon, 21 September 1953.

DURING THE FIRST HALF of this century architecture has advanced irregularly, sometimes quickly, sometimes slowly, sometimes standing still or even looking backwards. The pioneers of modern architecture date of course from the 19th century-but they were isolated figures, often regarded with curiosity or even amusement rather than with respect by their contemporaries. But for the past fifty years there has been a large and increasing mass, passing along this highway, but, as I have said, at irregular speed. I suggest that we have now reached the great crossroads of the century and the question before us is: do we turn to the right, as oldfashioned continuers of a bygone tradition: do we turn to the left following visionary experiments, as we see in some of the other arts: or do we go straight ahead as an ordered army of technicians forming one of the great evolutionary periods of our art?

This is what should be before us, the broad highway of ordered advance, the age of experiment, the fight for freedom over. It is at this moment that I wish to pausenot to call a halt-and make a few and perhaps somewhat fragmentary comments upon this crowd of ideas and realisations which is getting into its stride. Two main streams may be distinguished, though they are not isolated. There is first the advance in structural form and method and, second, the awakening of social obligations: the first shows itself in the technique of building, the second in the realm of urbanism. These two may appear to be not strictly or exactly comparable, but I believe they are the two strongest influences at work in our profession—the search for perfection in building technique and the attempt to find the setting for the life of the community. Can, I ask, any other art cover such ground as lies between these two objectives?

It is indeed a wide subject and I must content myself with some shorthand notes which, while they express my firmest beliefs, will I hope provoke discussion and perhaps passionate disagreement.

In the subject of construction of buildings, may I be allowed to look back a little further along the road of evolution which I have described. We have the authority of our revered Président d'Honneur1 that wood construction was the origin of architecture and that the requirements of fireproofing produced a system, in a skeleton frame, which has run through all the periods of architecture. But I think there was another stream which already showed a divergence in Egyptian and Greek times. While both these styles showed their reverence for wood-and even based much decoration on woodwork copied in stone or marble-they also used the solid continuous wall in contrast to the 'ossature' of wood. The Romans, further removed from primitive wooden construction, evolved two forms of walling, monolithic concrete and small units of brick (they continued primitive megalithic construction where they could get the stone, as at Baalbek). They made the mistake, however, of facing their noble plain structures with a veneer of quasi-structural details, enriched from Greek models. The Romanesque and Gothic (mediaeval) builders continued the Roman tradition of small units of brick and stone, but they discarded the Roman veneer (but in southern countries did not reject a purely decorative 'cladding' in marble or mosaic). The mediaeval builders used solid walls for many buildings such as castles, but for their churches they evolved the most exciting structural style which the world has seen up to quite recent times: the architects were asked to make their ceilings fireproof (the stone vault) and provide immense windows for the display of stained glass. An ossature in stone was the result based upon the thrust of the arch, which is really the opposite of the theory of the wooden beam. In London you can see side by side the stone and wood roof construction in Westminster Abbey and Westminster Hall -two completely opposed forms of construction—the wood is perhaps the more daring! Also, during the middle ages, there persisted the primitive wood construction of post, beam and panel—it is still to be seen frequently in Brittany, Normandy, S. Germany and England.

The Renaissance architect continued the Roman (and mediaeval) tradition of solid stone-walling and discarded the ecclesiastical equipoise. Construction became inert or static. He also, to M. Perret's horror, reverted to the Roman use of added decoration, but more unified and bonded in with the walling. One might add that he became less interested in construction and more in pure geometrical form. Again, the use of the Module, an inherent subjective measurement, was revived. There is no copyism of trappings here; and the humanist approach based upon the proportions discoverable in the human figure was equally immanent under Leonardo's inspiration.

When he was not aiming high—as in St. Peter's and St. Paul's—he produced a simple straightforward architectural treatment, well-lit and practical, based upon simple rules of proportion and ideas of symmetry. This, as I shall point out later, was his great contribution to social or civic design, as distinct from personal creation.

And now, at last, we meet the modern period when the principle of the ossature which had never died (bones last a long time)—was seized upon by technicians for, among many reasons, economy, quickness in construction and safety in greater height. The first manifestation was one which was, in the eye of the purist, more regrettable than anything which the Roman or Renaissance architects were guilty of—the steel frame, upon which could literally be hung the apparent solid walling of the skyscraper. Under the stylistic influence of the Chicago World's Fair, a riot of this building followed. May I describe it as the last flare-up of the reductio ad absurdum of historic nostalgia, to be seen in its extreme form at Manhattan. Nevertheless, I must add that during the period, fine noble works of art were produced-the Town Hall of Stockholm, and Liverpool Cathedral (still unfinished) making the old language live afresh; just as there are still poets who can write in alexandrines, sculptors who can carve a straight human figure and painters whose objects can be recognised by a child. These can be and are works of art, and perhaps more genuine than the pastiches of primitive and savage beauty, which pretend to be original.

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But to return to my subject, the discovery of reinforced concrete was in my view the greatest contribution to the advance of modern architecture and our Président d'Honneur was one of the first to realise that this was a re-birth of our oldest form of wooden construction—a real evolution—and he showed the world how it could be handled effectively, simply and beautifully, in his many famous buildings.

I dare not, owing to my ignorance, pursue the rapid changes in reinforced concrete technique which are opening up such possibilities in construction and are so influencing design since the discovery of the prestressed method. But I would direct your attention to the Einstein Tower in comparison with the new lighthouse near Boulogne. In the first, everything is plastic and might also be termed romantic: in the second, there is a return to standard blocks or units, resembling masonry, tied together with prestressing cables placed in grooves, as a parcel is tied up with string. It is amusing to recall that Sir Christopher Wren has been criticised for tying in the dome of St. Paul's with a chain set in masonry round its base. Similar hoops are used at regular intervals in the Berck lighthouse, designed by MM. Freyssinet and Tourry.

So, perhaps, not quite so rapidly, has the science of Town and Country Planning advanced. Haussmann's work in Paris and the Crystal Palace in London—both a century old—may seem old-fashioned today, but they contained the seeds of our modern practice.

In urbanism two branches of design are apparent, corresponding to the ossature and the wall, the regular and the picturesque;

1 Auguste Perret

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the former based upon a formal mathematic conception, the latter upon the susceptibility to external and particularly natural and historic influences. The former has been in continuous use from Babylonian, Egyptian, Greek, Roman, Mediaeval, Renaissance, 19th century down to today when it has been adopted by M. Le Corbusier for the main frame of Chandigarh, his great new town for India. This universal use testifies to its validity: but it is liable to abuse, as can be seen in its ubiquitous application in the 19th century in North America. The picturesque is equally old, as may be seen on the acropolis at Athens and Pergamos, and to many it is the more attractive technique, as is strongly expressed by Eliel Saarinen in his book The City. In England we have always leaned towards the picturesque, as is shown by our jardin anglais, in which we were influenced by the Chinese: our new towns are more controlled by topography than by theoretically-formed conceptions. The 'landscape park' is the most interesting result of the picturesque in modern town design. It is well known that Gabriel resisted this paradox applied to his Petit Trianon: but Marie Antoinette insisted on it for her side of the house. Since then the Bois de Boulogne has been transformed by Alphand, the Bois de la Cambre laid out in Brussels; and Olmstead carried the method a stage further at Central Park, which occupies a hard rectangular plot in a gridiron plan, into which he introduces an element of real landscape magic. A naturalistic setting outside the park, sometimes using actual features of the site, is now a normal treatment and can be seen at its best in Stockholm. The picturesque is however liable to abuse: we have seen gardens made of large rocks torn from mountains and walls of rough undressed stone carried through a window into a room; and pavements in which square flag-stones have been carefully broken up into crazy shapes.

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The green belt round a town is a further development of the picturesque: the walled city had open country at hand, generally protected by a military ordinance which forbade building. Vienna, which lost its inner ring 'glacis' (for which was substituted the less adequate Ringstrasse) made amends by creating the first green beltthe Wald and Wiesen Gurtel. This is a conception which we, in Britain, are fighting hard to maintain—as indeed to preserve belts already dedicated (e.g. The

London Green Belt).

The architect working within this framework of the city, whether on buildings in it, the general conception of the plan or its relation to its setting in the region, is not a free artist. He is, or should be, 'committed', as M. Sartre expresses it,2 to an act that leads to a social end. The community has a claim on him, no less than his individual art: he must be prepared for some sort of control in the interest of social neighbourliness. He cannot risk the irresponsibility of the painter or sculptor.

Saarinen is quite definite. He is, as every one must be, in favour of the 'intuitive sensing' of architectural fitness, a condition which obtained over long periods in the past. 'As long as such a state of things cannot be achieved intuitively from within. corresponding legislative measures must be imposed from without.' He goes on to say, 'It is sufficient . . . to state the deplorable fact that, generally speaking, architectural design in our days has very much shown signs of non-intuitive insensitiveness of form and coherence of forms.' This was written more than ten years ago (1942): have we moved along the highway towards more intuitive collaboration?

My French colleagues have an expression, slightly contemptuous it is true, for the sort of normal street architecture or civic design which attains a reasonable level of competence: 'pompier'. Might I define this as 'pump water', which flows evenly, clean and somewhat flat, as compared with the sudden sparkling uprush of the fountain or spring, which may wet you if you are not careful. The Paris of Haussman produced a good version of late Renaissance 'pompier', seen, for example, in the Avenue of the Opéra: the Opéra itself is clearly an individualistic outburst. Neither avenue nor opera may be to our taste today, but they are a clear example of simplified ordonné approach and elaborate uncontrolled climax. There is, as I have suggested, much of this 'pompier' architecture in towns of the Renaissance period, early and late: the central street of Dubrovnik (rebuilt after a fire), and Great Pulteney Street, Bath (England), which might be called utility Georgian, are typical examples. Both are saved from monotony by being short and having terminal features; (I have no wish to see another Rue Lafayette!) High-class 'pompier' is what we want for utility civic design today: and I suggest that the idiom of modern architecture is extremely suitable, combined with a greater flexibility in bulk grouping based upon the principle of 'plot ratio', in place of a simple height control of façades.

No artist of genius, of course, welcomes restraint-though I am not sure that some of the best art has not been produced under some form of it-Byzantine mosaic, mediaeval stained glass and Quattro-cento painting: a thousand years of ecclesiastical constraint. Even when theoretically free and absolved from tradition, the artist is inclined to drop into stereotyped forms of expression: these can easily become clichés, which are repeated as freely as those of past styles. One of the merits of the follower of genius is that he will slavishly copy a mannerism and so encourage the Master to new creative efforts. How quickly is a cliché let loose upon the world! Perhaps I might stop to explain exactly what I mean by an architectural cliché: I give the definition of a literary example, hackneyed phrases which, not being the simple or natural way of expressing what is to be expressed, have served when first used as real improvements . . . but have acquired an unfortunate popularity and come into general use, even when they are not more—but less—suitable to the context than plain speech'. The glass or aquarium staircase may have been an improvement when first used, but it has become a somewhat wearisome cliché, on innumerable blocks of flats. Standardisation is something quite different from the cliché, which in the first instance may be the offspring of genius, only becoming boring when too often repeated. The repeated frontages of many old towns were examples of good standard forms, but the doorways may become clichés-something clever, too often repeated: the 18th century pilastered and pedimented doors have been followed in modern architecture by the concrete slab with holes in it or the coloured tile surround. These are trivial matters and the genius cannot be blamed for the copyists of his mannerisms.

But the genius may sometimes drop into a standard form himself and repeat: the rectangular block with two walls of glass and two of unpierced stone, what Mr. T. S. Eliot, the poet, has called 'a honeycomb on end', has been repeated and copied at large: it is too big to be a cliché but it reminds one of the over-used classical forms with the inevitable central pediment and heavy cornice and parapet robbing top floor rooms of daylight. There is indeed real danger that some modern architects, through hero-worship, may adopt as a standard form something which was designed for a special purpose and climate. Architecture, at this rate, becomes little more than the specification on the plan of 'ten-storey blocks, standard design, here '

The question might well be asked by the 'Is there any need for an architect at all?' Might we not return to the patternbook of the 18th century, from which a gentleman's residence or a workman's cottage could be chosen, ready for erection. Or may the modern architect be in danger of dropping into standard pompier, for which merely competence is sufficient, instead of producing the creation of individual genius? Is M. le Corbusier to be the father of the pompier of the future?

It is to be hoped also that modern architecture will not revert to what has often been charged as a fault of Renaissance design-the adoption of a pre-conceived shape, a standard form into which the working arrangements must be fitted as best they can. I am told, though I can scarcely believe it, that the designer of a great recent building clapped a dome on the roof because he felt that his silhouette needed a bulge at that point.

Architecture is more serious than this!

High is our calling, Friend-Creative Art,

Demands the service of a mind and heart. . . .

Higher, indeed, than science or engineering. For science merely attempts to discover something that is already there, and engineering only seeks to control our existing environment by material convenience, by means which quickly get out of date. There is, of course, much pioneering merit in engineering works. The Cloaca Maxima was one of the wonders of the Roman world and we are always most indebted for the latest and most efficient method of the disposal of sewage; but when the method is superseded, the old sewage works have an archaeological value only: we don't visit them to admire their bygone efficiency. But an old castle, no longer of any military value, is just as alive as a work of art. Engineering does indeed at times have permanent value, for example the water tanks of Ceylon (300 B.C.), Roman roads and bridges. On the other hand, dynamic engineering quickly becomes demodé. The earliest locomotives and the primitive motor-cars are chiefly comic, more quickly out of date than a horsedrawn coach. At the recent Coronation of our Queen, several peers were allowed to use their horse-drawn coaches in the procession; no one came in an antiquated motor-car. The horse as a means of propulsion is a work of nature, and it might be argued that there was real artistry in the design of the coach.

The analogy between a motor-car and a building is absurd: the shape of a car bears no (or next to no) relation to its function: in spite of the shortage of carpark space, car fashion will blow up the body like a balloon of thin steel or make the back indistinguishable from the front.

Architects are often told that they make their buildings last too long: but the motor-car aims at 'artificial obsolescence, stimulated by unnecessary—though profitable-novelty re-designing' (Mumford). The aeroplane has so far escaped this ephemeral fashion design—this will perhaps come when flying is as personal as

motoring.

Pioneering is equally a merit in architecture, particularly on its constructional side. But it is always necessary to distinguish between a pioneering contribution, however meritorious, and a work of art, however self-centred. A man may be a great pioneer but a mediocre artist. Bach's son may have been a greater pioneer than his father: the world holds Sebastian as one of its divine creators; but only the student of music recognises Emanuel's contribution to sonata form, which was soon eclipsed by Haydn and Mozart, both equally great as pioneers and artists.

The progress of architecture, during the

remaining years of this century, depends then on a number of great artists. For do not misunderstand me-I have not been asking the schools for a supply of pompiers (but with so much normal social building to be done we must have sufficient competent architects, and I am convinced that we can get them by means of sound education.) But can you produce a great artist by education? Mr. Frank Lloyd Wright would say 'No'—indeed, I have heard him—and he should know, for it is impossible to say whether he is greatest as an artist or as a pioneer. But every one has his limitations and I cannot quite see Mr. Frank Lloyd Wright doing pompier work.

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So we can only hope for a succession of great artists to carry forward our architectural progression. And finally, so that our younger members may not be too optimistic, let us remember that the creative artistic faculty of man does not increase; like the powers of Nature, it is fixed and unaffected by adventitious circumstances. It is impossible to detect any artistic advance in the 3,000 years since Homer wrote, or the cave at Lascaux in the Dordogne was painted 20,000

vears ago.

The Work of R.I.B.A. Committees

No. 2. The Competitions Committee

THE ARCHITECTURAL competition system. like a city state within whose walls all men are free, must be treasured as a unique institution which can supply the architectural world with refreshment and inspiration. Fittingly enough, those walls are no natural ramparts, but man-made-even architect-designed.

In this country the R.I.B.A. has been for many years the chief architect-engineer of the defences of architectural competition, and at the same time the presiding

influence in its government.

The Institute carries on this work through the Competitions Committee, a body of sixteen members who serve at the invitation of the Council of the Institute, and who are appointed from year to year.

The Committee has one member who is there as representative of the Salaried and Official Architects' Committee of the Institute (Mr. Colin St. C. Oakes) and for the remainder is mainly composed of architects in private practice, with a strong and essential emphasis on the experienced architect-competitor, among whom the Chairman, Mr. Julian Leathart, and Vice-Chairman, Mr. Verner O. Rees, may be mentioned on account of their office without discourtesy to others.

Architectural competitions are not so frequent that a comprehensive experience of their direction can be built up in a short time, so that continuity is of rather special importance in this committee. It has been achieved by the long and loyal service of its senior members, and the gap of 1939-45

has been successfully bridged.

Each meeting is attended by the Secretary of the Institute, and the agenda will normally give an opportunity to review every competition which is in progress, or which is in preparation or in the even earlier stage of merely being contemplated by a promoter, as an alternative to the other methods of selecting an architect.

The Competitions Committee has no hand in the appointment of competition assessors (it is the President who advises on or approves such appointments) and it takes no direct part in the framing of conditions for any particular competition, for that is a function of the Assessor. But where there are special problems in the conduct of a competition, as distinct from purely architectural problems, the Assessor may find it necessary to consult the R.I.B.A. for an interpretation of the competition regulations, or he may seek authority to modify these regulations to suit the particular circumstances. He will in any case submit the draft conditions of his competition to the Institute for approval.

Matters so arising are the raw material of discussion in the Committee. Like all good policies, the policy of the Institute on competitions seeks to promote two con-flicting ends at the same time. The architectural competition must be made as fair and satisfying as possible to the competitors, the sum total of whose effort is perhaps little appreciated by most promoters; hence the quest for adequate premiums for those who are successful, and for proper exhibition in public of all the entries. Hence also the rule, which may seem stern to a promoting body, that the author of the design placed first by the Assessor shall be employed to carry out the work, and the premiums paid in accordance with his award-a necessary but drastic reversal of the general principle that he who pays the piper calls the tune; or in contemporary terms, that he who is the sponsor chooses the programme. Yet the promoter's point of view is at least of equal importance. Many as are the advantages to him of the competition method, he must inevitably face greater preliminary expense and delay, compared with the direct appointment of an architect.

It is the Committee's task to hold these two points of view always in balance, and when necessary to make recommendations to the Council for modification of the competition Regulations, or revision of the Model Conditions or the 'Directions for

Not all the Committee's deliberations are concerned with work at home, though it is their wish to see the competition system once again in more frequent use here. In the past twelve months some twenty competitions, large and small, have figured in the minutes, of which only eight were located in Great Britain. Of the others one is in Eire and the majority within the province of one or other of the overseas societies allied to the R.I.B.A. Two are international competitions and fall within the field of the International Union of Architects.

Here, in the organisation and conduct of big international architectural and town planning competitions, new international regulations are being framed, through the agency of the U.N.E.S.C.O., and the R.I.B.A. is taking its part with its own competition experience to guide it.

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The Building Exhibition 1953

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At Olympia, 18 November to 2 December

The Exhibition in General. The Silver Jubilee Building Exhibition appears to have justified itself by being the largest and best attended yet held, the numbers being twenty per cent up on the previous record. Most exhibitors also seem to have been well satisfied with the volume of enquiries and there was a general feeling of optimism. The smog of frustration which has hung round earlier post-war exhibitions, in common with most building industry activities, was noticeably clearer. One heard less about shortages, restrictions and delayed deliveries; substitutes were in somewhat less evidence. Such recent events as the freeing of softwood from control and the reduced price of copper have not been without influence in the general feeling that the industry is becoming more normal once again.

The Minister of Housing and Local Government, in opening the exhibition, sounded a note of progress. Congratulating the industry on having raised the output of houses by 50 per cent in two years, he said that cement production had gone up by 13 per cent and brick making by 20 per cent. He had 'a sense of confidence' in the forthcoming year and he was therefore tackling the problems of old houses and slum clearance. The Minister's optimism seemed to epitomise the general atmosphere

of the exhibition.

This Jubilee exhibition was without question the best looking that anyone can remember. Most exhibitors now realise that if they are to attract the attention of architects, their stands should be well designed. In earlier years those stands which were designed by architects or other professional exhibition designers tended to stand out in the view one gets from the

gallery of the main hall. This year the same view revealed a general uniformity of pleasing stands, though in some the display technique tended rather to overshadow the goods displayed.

We expect that most architects who were able to do so visited the exhibition, so we refrain from giving any general account of familiar products though, in doing so, we inevitably fail to mention many of the oldestablished firms whose products are the current stuff of building. Instead, in the notes which follow, we are describing those new and progressive items which we were able to discover and which a casual visitor may have missed.

On behalf of members we wish to express thanks to Mrs. M. A. Montgomery for once again placing the R.I.B.A. Club at our disposal and for providing a tea service. It is hardly necessary to say that these facilities were much appreciated by all who used them. The exhibition was

large and for some reason Olympia is a tiring place, so that the club was a most welcome haven to those whose legs and feet felt the strain or who did not feel equal to coping with the crowds at the public refreshment bars.

Displays by Government Departments. The various Ministries which are concerned with building have long ago abandoned the attempt to present at the Building Exhibition a comprehensive survey of their activities. Instead they pick out a few salient matters which they think should be brought to the notice of architects and the industry—matters on which there is some laxity or ignorance but which, if more generally understood, would contribute to efficiency.

The Ministry of Works' exhibits concentrated on improving productivity in the industry. To this end they covered the need for full advance information by the building owner, close collaboration between architect, consultants, contractor and subcontractors all through the job, better job organisation by the contractor, proper use of machines and detailed programming and progressing; the architect, they say, should know more about and help the contractor's

site organisation problems. Their new programme of slum clearance and the improvement of obsolescent houses were the subjects of the display of the Ministry of Housing and Local Government. 'New Life for our Towns' was the governing slogan. Various ways of developing and improving residential areas of different densities and types of dwelling were shown. The types of property suitable for improvement or conversion were illustrated, together with the kind of work which would rank for an improvement grant under the Housing Act 1949. This is clearly a subject on which the architectural profession will have to renew its prewar studies, specially that part which concerns the unspectacular task of improving old

The principal items in their multifarious activities which the Building Research Station picked out for display were, first, methods of constructing domestic chimneys to overcome the bad effects of condensate from flue gases, a problem which follows inevitably from the increased use of more efficient appliances. Then, an interesting exhibit showed the result of the Station's research into the problem of making bricks from some of the two million tons of pulverised fuel ash produced each year by power stations throughout the country. Bricks made with coal measure shale and 40 per cent of pulverised fuel ash gave encouraging results, but as the aim is to use as high a percentage of ash as possible, especially in districts where the power station is not situated near suitable clay fields, tests were made with Etruria marl and 85 per cent ash, and satisfactory bricks resulted. Sample bricks made with different

Another exhibit on the B.R.S. stand was a portable dampness meter they have developed and which is now being made

mixes were on view.



The stand of the Carter Group of Companies, the work of a group of artists, illustrated the decorative possibilities of ceramics

commercially. It consists of a disc about 6 in. in diameter containing a graduated arc and pointer needle for reading the relative humidity of the material against which the instrument is placed. The arc is coloured green for R.H. readings up to 70, yellow for readings 70–90, and red for 90–100. With this instrument it is possible to determine whether or not walls and floors are dry enough for the finish to be applied. In the case of floors the finish can be applied with reasonable safety if the reading is not more than 80, and for walls no special precautions need be taken if readings are below 70.

The Joint Fire Research Organisation illustrated their recent work on the fire resistance of prestressed concrete and nofines concrete, on both of which materials they can now make fairly definite pronouncements. They also gave some particulars of their present extensive study of the ways in which fire spreads through buildings and had on show their new small-scale apparatus for determining surface spread of flame in lining materials.

Ardux Floor Tiles. For nearly 20 years Messrs. Aero Research Ltd. have carried out research into plastic materials and synthetic resin adhesives for structural use in aircraft, and the knowledge thus gained has been turned to the introduction of a new flooring material, made in 'tiles' 9 in. by 9 in. by 7/8 in. thick, called Ardux Tiles. The surface is a hardwood veneer adhering to a resin-bonded sand base which is stable and inert, and as in an area of 9 in. by 9 in. any movement of the wood surface due to change of moisture content would be negligible the tiles are suitable for laying over sub-floor heating or in the vicinity of electric fires or radiators. The bonding resins used guard the tiles against the effects of damp and rising moisture. The tiles are also proof against dry rot, mould and similar troubles.



The 'Malta' metal window with metal shutters by Henry Hope & Sons Ltd.

A Metal Window for Tropical Climates. Windows in tropical and sub-tropical climates need louvred shutters. Wooden shutters and their fixings require a lot of fiddling detailing by architects and consideration of their relation to the window. Messrs. Henry Hope and Sons have produced a combined metal window and shutter unit which goes into place all complete. There are two types, with and without centre mullion. Both types have inward opening casements with a fixed sub-light at the sill to avoid knocking off the window board those objects which people will insist on putting there. The casements are hung on friction hinges which hold the casement firmly open in any position, no stay being necessary. The shutters are fitted with a sliding bolt which locks them firmly when either open or shut, so that it is not necessary to lean out of the window to fasten them open. Both windows and shutters are of steel protected against corrosion by hot dip galvanising. Alternatively the louvres may be of aluminium. Messrs. Henry Hope and Sons call it the Malta window.

Among the many other things also shown on their stand was a design of large window for schools which Messrs. Hope call 'curtain wall fenestration'. This consists of a steel frame which takes weight and wind loads over which are fixed, both inside and outside, aluminium cover strips and beading to hold the glass. Nowhere is the steel frame exposed. The opening casements are hot dip galvanised for economy and it is thought that architects will like to have these picked out in bright colours.

Metal Angle Bead. Protection of that vulnerable part of a building, the plaster external angle, can be simplified by using an Expamet expanded metal angle bead. This is a small metal bead with expanded metal wings which are embedded in the full thickness of the plaster on each side of the arris. The bead not only does away with the need for a special plaster for angles but also acts as a straight edge and guide for ruling off the plaster. The Expanded Metal Company, Ltd., Burwood House, Caxton Street, London, S.W.1.

Ventilators. Colt Ventilation Ltd. seem to have something new at every Building Exhibition. This year is no exception. Their clear-opening ventilator is a unit specially designed for hot industries and consists of a series of hinged connected louvres in a frame which is the exact size of a patent glazing unit. A lever at ground level opens the louvres and the units can be worked singly or motor controlled in batteries. Being designed to exclude sun, they can be fixed on the south slopes of roofs as well as on the north, so that the building can be 'opened up' on hot days. When closed they are completely rainexcluding and self-draining. Being shallow they lie close to the roof or wall surface. The whole construction is of hardened aluminium alloy and therefore free from maintenance and the louvre bearings cannot rust up.

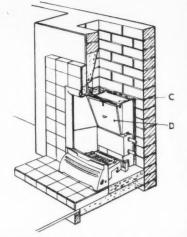
Somewhat similar is the P.R. ventilator usable on pitched roofs. It also consists of a series of louvres but is shaped to be rain excluding. It can be hand operated, but a most interesting feature is automatic control by a non-electric thermostat. The thermostat forms part of the ventilator unit which it opens as soon as an excess of heat occurs immediately below. Thus it is free from accidental operation by draughts when doors are opened, as thermostats fixed near floor level are liable to be; also it

needs no wiring.

Colt inflow units are powered ventilators operating through wall or roof and consisting of standard parts which can be assembled in several ways. These parts are the inlet, variable-speed reversible fan, heater, filter, outlet, recirculation damper and trunking lengths. There are three features of this unit which will appeal to the ingenious-minded. The roof inlet is designed so that it can be fitted to any pitch of roof; the recirculation damper can take air wholly or partly from inside or outside by a simple hand adjustment; the outlet is fitted with a 'variable air projector' which consists of a grid of plastic louvres all of which can be separately adjusted by hand to deflect streams of air in three or four

Ring Main Fuses. Messrs. Ediswan displayed a Clix ring main fused plug embodying a simple method of renewing the cartridge fuse. In the back of the plug is a balloon-shaped aperture in which is a circular revolving plug. A quarter turn of this plug releases the fuse which can then fall out of the U-shaped bottom of the aperture. A new fuse is inserted, the plug is given a quarter-turn in the opposite direction and the fuse is swung into hidden contact with springs which press it against the appropriate terminals. Nothing could be simpler.

There was also on exhibition a similarlyfused adaptor plug taking the usual ring main plug; this is intended for installations where provision of outlet sockets is insufficient for the needs of the user. The Edison Swan Electric Co. Ltd., 155 Charing Cross Road, London, W.C.2.



The Eagle boiler set. C is the damper, D the cleaning door

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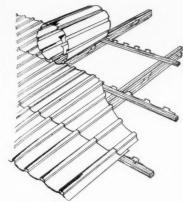
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The Eagle Boiler Flue Set. These sets can be fixed in a fireplace opening independently of the inset fire, which can be of various appropriate types. Each set is complete with boiler, firebrick base, side bricks and sliding damper and frame. The No. 4 set is designed to give space heating up to 1,500 cu. ft. with a maximum boiler output of 15,000 B.Th.U. per hour. The No. 3 set also gives space heating up to 1,500 cu. ft., but the maximum boiler output is 10,000 B.Th.U. per hour. Cleaning the flue is easy because the inclined plate above the boiler can be taken off and so gives access to the flue. Messrs. Radiation Ltd., Radiation House, Stratford Place, London, W.1.

The Frenger Ceiling. A ceiling which is a radiant panel heating unit, is a soundabsorbing surface and is removable in units for access to sub-floor services, looks like having a wide field of use in commercial • spon buildings. Indeed Frenger ceilings are being installed in the new control building at London Airport, now being built to the designs of Mr. Frederick Gibberd [F]. The ceiling consists of 2 ft. square perforated panels of aluminium. Water-carrying steel tubes of 4 in. diameter are suspended by adjustable hangers and the ends of the aluminium panels clip over the pipes, being easily put up and as easily taken down. Insulating quilting is laid over the pipes and panels and thus upward heat transmission is lessened and good acoustic effects are obtained. The high thermal conductivity of aluminium ensures rapid transmission of heat or cold from the water Mess flowing through the pipes. In one installation the weight of the ceiling, including (Lon panels, pipe, water, insulating materials Holt and clips is given as being about 34 lb. per square foot. The system has the great The advantage that in buildings which have may complicated services, like London Airport heati control tower, alterations of these services expe can be made with the minimum of in a disturbance. The designer is a Norwegian, Fuel Otto Frenger.



Fural roofing

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Fural Roofing. An ingenious form of clipon roofing sheeting, invented by a Swiss architect and now being produced in this country, was on show for the first time. It is called Fural and is made of aluminium manganese alloy manufactured in rolls up to 90 ft. long and 27 in. overall width, the effective width being 24 in. The rolls are ribbed transversely at 6-in. centres with ribs of dovetailed section. In the case of a normal timber roof, battens are laid across the rafters at 2-ft. centres; along the upper edge of the battens aluminium alloy retaining strips are nailed and these have projections shaped to fit into the dovetail ribs of the roll of roofing material. The roll is then gradually unrolled and the ribs are pressed into position over the projections on the retaining strip, allowing a 3-in. overlap above each batten. The next roll up the roof is then similarly pressed over the ribs of the lower roll previously laid, and in the upper 3 in. of each roll the ribs are narrowed slightly to accommodate the overlap. When laid the sweep of the decking between the ribs does not quite touch the corresponding sweep of the retaining strip, so that any expansion or wind suction has the effect of tightening the ribs against the sloping sides of the retaining strip projections. Thus the decking can be laid without any nail or screw holes. As an air space below the decking is required to prevent condensation, counter-battening will be necessary in forms of roofing structures other than open rafters.

Ridges, verges and flashings may be constructed and these are kept in place by narrow fixing strips which clip over the decking ribs. The decking may be laid on roofs with a minimum slope of 6 degrees, or it can be used as wall cladding. Licensees, water Messrs. S. W. Ronald and Company (London) Ltd., Bank Chambers, 329 High terials Holborn, London, W.C.1.

great The Heat Pump. Some idea of what we have may expect in a few years in domestic irport heating and cooling from this stillervices experimental piece of apparatus was shown m of in a combined display by the Ministry of egian, Fuel and Power, the British Electricity Authority, The British Electrical and Allied



The Colt clear-opening ventilator

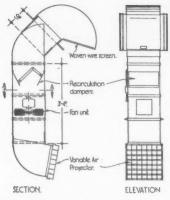
Industries Research Association, The South Western Electricity Board and Messrs. Matthew Hall and Co. Ltd.

The outstanding fact about it seems to be that space heating and hot water supply can be obtained with a much lower fuel consumption than with normal methods. The experimental unit in the Royal Festival Hall has proved its ability to provide space heating at a fraction of the fuel cost which would otherwise be incurred; it is also used for cooling the Hall in summer.

In principle the heat pump takes unwanted heat out of the surroundings and adds it to the hot air or water required. A large-sized domestic-type model on the stand showed heat being taken from a larder and put into the hot water system.

An experimental unit installed by the Chief Engineer of the South Western Electricity Board in the house of one of his staff maintains the larder at 40° and provides 50 gallons of hot water per day. The electricity consumption is three to four units per day and the load is 350 watts. It is not claimed that this will meet all hot water demand and an immersion heater may be necessary for boosting, but clearly there is a saving in electricity consumption as against a 2,000 watt immersion heater as the sole source of water heating, and a cool larder is thrown in.

At present there are about 2,000 heat pumps being used in the U.S. for space heating and air conditioning of houses. We have not the need for house cooling in this country (specially at Coronation times!) that the Americans have and it seems possible that domestic use in Britain will be restricted-at least at first-to larder cooling and water heating. The next Exhibition in two years' time is likely to see heat pump domestic plants in full commercial production. This seems to be just round the corner. A very tentative figure of £150 per domestic plant was mentioned and the point added that this was offset by a low current consumption.

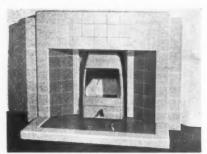


The Colt inflow unit ventilator

Phomene Mortar Plasticiser. The wellknown advantage of air entrainment in concrete has led the Pyrene Company to investigate the possibility of using the same technique in the case of mortars, and the Phomene mortar plasticiser is the result. The addition of this foaming material to cement enables mixes of 1 cement to 6 sand to be used and still give that workably 'fat' mortar which is normally obtained by making a stronger mix than the work really needs. Shrinkage of a lean mix is less than that of a strong one and this of course reduces the risk of cracking. This is of particular importance in rendering, and the modern tendency is to get away from rich, dense mixtures in favour of more porous renderings, an apparently paradoxical idea that is in fact proved true by extensive observations of practical work.

The Phomene light concrete process can be used for a variety of precast and in situ purposes, such as building blocks and insulating roofing based on cement or mixtures of sand and cement, and densities of 20 lb. per cu. ft. up to 100 lb. can be obtained at will by suitable adjustment of the respective proportions of the ingredients. The Pyrene Company, Ltd., Great West Road, Brentford, Middlesex.

Cascalite. This is a translucent material made with polyester resins and glass fibres in corrugated form to fit in with other corrugated roofing materials; its materials and construction enable it to resist impact blows and the corrosive action of the fumes frequently met with in industry. It will span 5 ft. between purlins without extra framing, and can be had untinted or in pastel shades of light ivory, skylight green, or sunlight yellow. It weighs about 8 oz. per sq. ft. and can be sawn, screwed or nailed. Compared with glass its visible light transmission ranges from 68 to 80 per cent according to the tint. Standard lengths of sheet run from 4 ft. to 8 ft., and overall widths from 26 in. to 42 in. according to the type of corrugation. A direct flame will ignite it, but it burns slowly and does not melt or drop in globules as the reinforcing material is non-inflammable. Messrs. Cascelloid Ltd., Abbey Lane, Leicester.



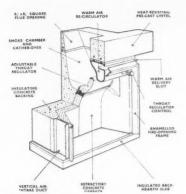
Messrs. Radiation's Parkray fire

The Parkray Fire. This is a fire designed to reduce the fuel inefficiency of the usual open fire. It is a free-standing self-contained model that will fit into most existing fireplace openings or into a tiled recess. An adjustable restrictor in the soffit plate controls the rate of mixture of air with the flue gases. As the appliance is free-standing, air is warmed by the back and sides and is convected into the room. There is a built-in gas burner for lighting the fire, and an extension plate is available which can be attached to the fire to give overnight burning. Recommended fuels are coke. 1-2 in., household coal, 1-3 in., and the usual sizes of manufactured fuels. Messrs. Radiation Ltd., Radiation House, Stratford Place, London, W.1.

Celotex Highlight Finish. The Celotex stand showed a portion of a ceiling incorporating the Highlight finish that is now obtainable on Celotex insulation boards. It is a smooth. white finish that is applied in the factory to the boards, which can therefore be put up as delivered without need for further decoration; nevertheless the boards can be painted or distempered without the need for sizing or distempering.

Also on display was the Celotex fire resistant board made, as are all Celotex boards, from tough sugar cane fibres, but in this case the board is given a fire resistant surface in which asbestos plays its wellknown part in preventing the spread of fire. The board has been rated Class 1 in the spread-of-flame test. It is made in lengths of 6, 7 and 8 ft., 2 ft. in width and ½ in. thick. Messrs. Celotex Ltd., North Circular Road, Stonebridge Park, London, N.W.10.

Murals. Illustrations of modern buildings, especially those devoted to refreshment and recreation, show that murals are being increasingly used and this tendency may well be extended. The firm of Kemeny had on their stand some sketches picked from their stock which gave an indication of the possibilities of contemporary mural art, and this the firm did with the idea of bringing together the contemporary patron and the contemporary artist, and as they are in contact with many artists they can provide an appropriate design for any particular subject. They can arrange for pre-made murals as well as for those to be painted direct on the walls. Kemeny, Cardinal House, 39-40 Albemarle Street, London, W.1.

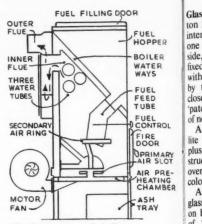


The Finch fire unit

The Finch Fire Unit. The success of Messrs. Finch's chimney throat unit, introduced some two years ago, has led the firm to undertake further research to improve the efficiency of the open fire which is such a favourite with the British public, and they have now produced their fire unit. This is a complete unit ready for insertion into a brick fireplace opening 223 in. wide by 13½ in. deep. To avoid heat losses from the fire to the surrounding brickwork and hearth foundations the refractory concrete fireback and back hearth slab are insulated with a vermiculite concrete backing, so that the fireback becomes a reflector instead of an absorber of heat.

An adjustable throat regulator enables the volume of air passing up the flue to be restricted and the amount of ventilation in the room is thereby controlled. It has been calculated that in a normal room with an ordinary fire having an unrestricted throat the rate of air change is of the order of 6,000 to 8,000 cu. ft. per hour, and it is claimed that the new fire unit reduces this rate by about half. In addition, the metal front of the unit incorporates vertical air ducts at each side and a horizontal air chamber across the top of the fire opening, air intake slots being at hearth level. This arrangement allows air in the horizontal chamber to be heated by the hot gases at the top of the fire and passed into the room through a delivery slot at the top of the front of the unit. A special heat-resisting concrete lintel with a square flue opening enables the flue to be built directly off it. The design of the unit should give maximum heat with the minimum use of fuel. Messrs. B. Finch and Company, Ltd., Belvedere Works, Barkingside, Essex.

The Watts Automatic Boiler. In this appliance fuel is not thrown directly on the fire but is put into a hopper with a sloping base in which is an opening leading to a fuel feed tube which can be raised or lowered to give an angle-of-repose fuel pyramid of varying extent. A small domeshaped additional boiler is set in the firebox and an air-tube passes through it to a secondary air ring just above the level of the fuel; this arrangement allows prewarmed air to mix with the gases rising from the fire-bed and assist in combustion.



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The Watts automatic boiler

The output of heat is determined by a resu thermostat, and when the water falls below the required temperature an electric blower may fan comes into operation and forces air whe into the fire to liven it; when the tempera- clear ture rises sufficiently the blower cuts out and a natural draught enters between the of a stationary blades, allowing the fire to fram slumber without going out.

There are four models of the boiler with glass respective output ratings of 60,000, 80,000, that 125,000 and 170,000 B.Th.U. The finish field is stove enamel in various colours. The recommended fuel is anthracite grains. at th Watts (Factors) Ltd., Lydney Industrial Estate, Lydney, Gloucestershire.

Levelling by Water. The natural law that water finds its own level is made use of by the Aqualev, which comprises two 9-in the ditid transparent indicator tubes joined by a long can length of tubing filled with liquid, but each indicator tube has a screw-type airvent cap so that when the cap is screwed down the airvent is covered and the liquid cannot escape, and so the appliance is always two ready for use. Attachments called Aquarules can be obtained; these are 12 in. long metal plates graduated in inches and six teenths, made to clip on the indicator tubes. Placed on the floor, or up against a ceiling or suspended work, these plates enable level points to be determined which could not be read without them. The florible tube not be read without them. The flexible tube man allows levelling points to be marked when obstructions on the site would prevent the use of a dumpy level. Messrs. Austin and Trimingham 59 Westers 19 Property 19 Trimingham, 58 Warwick Gardens, Lon external don, W.14.

Prestressed Concrete. The Prestressed Converted Development Group of the Cement and Concrete Association had an extensive display of post-tensioning methods and precast prestressed products. Frequent demonstrations with full-size models were given of post-tensioning by the Freyssinet Magnel-Blaton and Lee-McCall systems. Various prestressed precast products were designed. Various prestressed precast products wer Anti displayed, for use in roofing, flooring aimi beams, columns, piles and fence posts. This how attendances at the demonstrations showing. the interest that prestressing arouses.

Glass. The well-designed stand of Pilkington Bros. Ltd. contained its usual array of interesting varieties and uses of glass. If one approached the stand from the correct side, a pair of frameless Armourplate doors, fixed in a similar glass surround, opened without apparent human aid, but in fact by the interruption of a ray; they also closed automatically behind one. The patch fitting' top hinges of these doors were of neat design held in the glass surround.

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A w.c. screen of a single sheet of Vitrolite was shown. This is only 11 in. thick plus 1 in. each side for the frame, a construction which allows some saving of overall length in a row of closets. The colours were black and pale blue.

Among the many types of obscured glass we observed one which was smooth on both sides. This consists of two sheets of 'Borealis' glass with the pyramidal dotted faces interlocked together. The ed by a resulting obscuration had a pleasant 'shot silk' effect and it is thought that this glass blower may be useful in such places as hospitals rces air where both obscuration and surface empera cleanliness are necessary.

The 3 ft. wide bowl of a fountain made cuts out veen the of a piece of thick rough glass, a glass fire to framing for training indoor climbing plants, and painted and fired colours in toughened iler with glass were three examples which revealed , 80,000, that there is still plenty to discover in the e finish field of decorative use of glass.

irs. The Square Hole Digging. Two tools displayed at the exhibition simplify the job of digging ndustrial holes for square concrete posts or piles, or excavating for fence posts and the like; they are the Multipick and the Square Hole law that Digger. The Multipick is a steel tube with se of by interchangeable ends to suit the soil convo 9-in ditions and it contains a steel ram which but each can be used to give a 14 lb. hammer blow to break up stones, concrete or rock, or it can be used for tamping. When sufficient soil own the has been loosened the digger is placed in position; this is a square-ended tube with always two hinged plates at the bottom which can d Aqua be made to close by means of levers and so contain the loosened soil; the tool is then or tubes withdrawn, the blades are opened and the spoil is released. For a 6-in. square hole a ceiling spon is released. For a 6-in. Square note the digger can be operated by one man, but for 12-in. and 18-in. square holes a twoch could ible tube man ratcheted model is used. The 6-in. ed when model digs a hole 2 ft. 6 in. deep, or 5 ft. event the with extension pieces; the 12-in. and 18-in. astin and models go down 3 ft. 6 in. or 12 ft. with ns, Lon- extensions.

With these tools square holes can be dug without removal of unnecessary soil, as sed Con would be the case if dug by pick and Comen shovel; there is no waste of concrete as the Cemen, hole is kept to the required size all the way ods and down, and the amount of soil removed is reduced to the minimum. In loose soil, steel square shuttering units can be driven down, using the Multipick. S. Guiterman systems & Co. Ltd., 37 Soho Square, London, W.1.

icts wer Anti-Condensation. The many techniques flooring aiming at the reduction of condensation osts. Thishow what a nuisance it can be in a builds showing. Several anti-condensation treatments do not try to prevent condensation but merely to absorb it so that it does not drip. Seculate is a product which, to quote the manufacturers, 'differs fundamentally from previously available anti-condensation paints in that it does not act by absorbing moisture but sets up a barrier between the atmosphere and the surface on which Seculate is applied. Here, indeed, is a minor miracle-moisture will not settle on Seculate'. In proof of this a number of identical copper canisters were exhibited on the stand, were coated on the outside with various ordinary and anti-condensation paints, including Seculate, and were filled with ice and water. Any moisture collecting on the outside of the paints dripped off the bottom of the canisters and was collected in measuring tubes. On the canister coated with an ordinary glossy enamel the first drop appeared in 10 minutes; five conventional anti-condensation paints did not show a drop until 30 minutes, 45 minutes, and an hour had elapsed, and the Seculate-coated canister did not form even a drop during a fourhour test, by which time 21.5 c.c. of moisture had dripped off the worst case of conventional paints. The Pearl Varnish Company, Ltd., Treforest Trading Estate, Pontypridd, Glamorganshire.

Stramit. Messrs. Stramit Boards Ltd. inform us that on 1 December a brief case was stolen which contained that day's records of visitors to their stand who were promised technical folders.

The firm will be grateful if such visitors on that day will write to them at Packet Boat Dock, Cowley Peachey, Uxbridge, Middlesex.

(To be continued)

Practice Notes

Edited by Charles Woodward [A]

IN PARLIAMENT. Good Agricultural Land (Use). Asked what steps he will take to ensure that housing authorities shall be restrained from building on good agricultural land in cases where other inferior land might be used for such building purposes, the Parliamentary Secretary to the Ministry of Housing and Local Government replied: Under existing arrangements every proposal by a local authority to build houses on good agricultural land is most carefully scrutinised in consultation with the Ministry of Agriculture; and if there seems to be alternative land which is less valuable to agriculture, and which is at all suitable for the houses, attention of the authority proposing to build is directed to it. In appropriate cases approval for building on good agricultural land is refused; but most proposals of the kind are checked before they reach an advanced stage; and all local authorities have been told that good agricultural land must not be taken for housing unless it is unavoidable. I am sending my hon. Friend a copy of the circular in which that direction was given. I would also refer him to the latest Supplement to the Housing Manual which is designed, amongst other things, to encourage economy in the use of land. (17 November 1953.)

Building Byelaws (Minimum Ceiling Height). In answer to a question regarding the reduced height of habitable rooms in Model Byelaw 77, the Minister of Housing and Local Government replied: The minimum height of habitable rooms was first reduced to 7 ft. 6 in. in the Model Byelaws issued in November 1952, and it was so reduced for the reasons that since 1945 many local authorities had either amended or relaxed their byelaws to permit the building of houses with rooms of that height, that such height is regarded as adequate on both hygienic and architectural grounds, and that it was recommended by the advisory committee which assisted in the preparation of the model. I have refused approval to a byelaw requiring a greater height in about 100 cases, and in most of them the model has now been adopted. I think it unreasonable to enforce as a penal requirement a height greater than that which well-informed opinion regards as adequate. (8 December 1953.)

Historic Buildings Councils (Members' Remuneration). Asked which members of the Historic Buildings Councils are to receive remuneration for their services; and what are the amounts of such remuneration in each case; and what expenses allowances are to be given, the Minister of Works replied:

Only the Chairmen of the Historic Buildings Councils will receive remuneration. The Chairmen of the English and Scottish Councils will be paid £1,500 and £500 per annum, respectively. No remuneration for the Chairman of the Welsh Council has been settled pending experience of the amount of work involved. All the members of the three Councils will be entitled to claim travelling and subsistence allowances at Civil Service rates. (17 November 1953.)

Building Land Inquiries (Departmental Representation). Asked why, in some recent inquiries into cases where housing authorities sought to build on good agricultural land when other inferior land might be used for building purposes, his Department was not represented; and if he would make a statement, the Minister of Agriculture replied: I do not know to what particular inquiries my hon. Friend is referring, but in any case it is not the practice for representatives of one Government Department to give evidence at an inquiry held by another Department. (19 November 1953.)

Departmental Staff (Appointments). Asked what the reason is for the appointment of nine more Land Commissioners, main grade, three architects, main grade, and four architects, recruitment grade, in the Land Division, in excess of the number employed in 1952-53, the Minister of Agriculture replied: The actual increases in the grades have been six land commissioners, main grade, one architect,



Infringement of copyright: the house built in Hampshire in 1933



Infringement of copyright: the house built in Sussex in 1953

main grade, and six architects, recruitment grade. The appointments were made because suitable candidates became available to fill vacant posts in the approved complement. (26 November 1953.)

New Town Corporations (Land Acquisition). Asked whether in order to simplify procedure new town corporations can be authorised to pay agreed claims for loss of development value in all cases of acquisition of land, whether by agreement or by compulsion, the Parliamentary Secretary to the Ministry of Housing and Local Government replied: My right hon. Friend is afraid that this is not yet possible in all cases. Where land is acquired compulsorily and the compensation cannot be settled by agreement, the basis of assessment remains fixed by the Town and Country Planning Act 1947, until that is amended. There are also some cases where the amount payable on the claim for loss of development value cannot be determined in advance of further legislation. But for the most part public authorities, including new town corporations, are free to pay the amount of the agreed claim relating to the land in addition to the existing use value. The question and answer will be brought to the attention of the new town corporations. (1 December 1953.)

BUILDING LICENCES. Arrangements for 1954. Announcing the building licensing arrangements for 1954 in the House of Commons on 30 November, Sir David Eccles, the Minister of Works, said: The free-limits in force are £2,000 for industrial and agricultural work and £500 for all other work including housing. The freelimit for industry and agriculture will be raised for the year 1954 to £25,000. The free-limit for all other work will be raised to £1,000.

House Licences. A further degree of freedom will be given to the private house builder. From 1 January 1954 local authorities will give licences automatically for houses up to 1,500 sq. ft. in size and for not more than 50 houses at a time. They will also have discretionary powers to issue licences for houses up to 2,500 sq. ft. Proposals for houses in excess of that area will be referred to the Minister of Housing and Local Government.

Applications to build more than 50 houses at one time will be referred by the local authority, with their recommendation, to the regional office of the Ministry of Housing for consideration in consultation with my Ministry, since building plans of this size may affect the programme to be carried out in an area wider than that of the local authority immediately concerned. My rt. hon. Friend the Secretary of State for Scotland has asked me to say that these arrangements for private house building will also apply to Scotland.

As a further step towards simplifying licensing procedure, from 1 January next applications for building licences for all classes of buildings, except housing, should be sent to the regional licensing office of the Ministry of Works.

If in any area the load on the building industry appears likely to become excessive, my regional officers will operate the starting date procedure and thus preserve a balance between building work in the private and public sectors of the economy.

Sponsoring by the Board of Trade and the Ministry of Supply for building licences is to cease. The Ministry of Works will apply to the Board of Trade or the Ministry of Supply in cases where they wish to know whether the proposed building is of vital importance in the national interest.

ARCHITECTURAL COPYRIGHT. The question of the infringement of copyright in architectural design is so arguable that cases which lead to legal action are rare. The following instance in which the architect plaintiff succeeded may therefore be of interest to other members.

In 1933 a house was built in Hampshire to the plaintiff's design. A description, with plans and photos, was later reproduced in the technical press. In 1953 the plaintiff heard from another architect, hitherto unknown to him, that a copy of the Hants house was being built in Sussex. A visit to this building convinced the plaintiff that the elevation fronting the road was indeed a copy, although a poor one, of his earlier design. While the latter contained nothing dist abnormal, as will be seen from the photo tha graphs, both front elevations contained to req many points of similarity for the 'copy' to fen have been produced by chance. The plaintiff be was so convinced of this that he decided to uno sue the defendant, even at the risk of losing because, as he put it, whatever the legal em experts might say, no architect, seeing the of two elevations, would ever believe that the Sussex front was not a copy of the earlier uni one in Hants.

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The case was settled before coming to court, the defendant agreeing to pay pul damages and costs, and to surrender his LAV drawings of the house concerned.

The person infringing the plaintiff's PLA copyright was not an architect.

LIQUIDATED DAMAGES AND BONUS the CLAUSES IN CONTRACTS. It is often AN suggested that a clause in a building con-use tract providing for liquidated damages for delay in completion is invalid unless there MI is also a bonus clause for earlier completion GC Co than the contract date for completion.

No authority is ever produced for this the suggestion, which leads to the conclusion of that it has no foundation. Indeed, it would mi be surprising to find that the R.I.B.A. ab Form of Contract was defective because 1s. of the absence of a bonus clause. That contract has been in existence for many all years, revisions have been drafted by an Counsel, claims under the liquidated rec damages clause have been made and sub clo mitted to arbitration, and yet invalidity has denever been suggested as a defence because a 1 there is no bonus clause.

In a recent case before the Court of an Appeal, where the architect had extended of the time for completion retrospectively the under clause 18 of the R.I.B.A. Contract, alr and the employer claimed liquidated rer damages, there was no submission on im behalf of the contractor that the claim sui was invalid because there was no bonus shi clause. The employer in the case was fro successful in his claim to deduct the act damages, which amounted to about £3,000 ho

The Ministry of Works Contract has a con clause providing for liquidated damages for lar delay, but it has no bonus clause. It is no res thought that a government department would use a contract to which an objection on the ground of invalidity could be taken.

PLANNING DECISIONS. The JOURNAL OF PLANNING LAW publishes the results of appeals to the Minister against conditions imposed by a local planning authority in granting permission for development. In that Journal for November 1953 an appeal is reported where in granting permission for the erection of houses and the construction of a service road, a condition was attached that a continuous unclimbable fence should be provided and maintained, separating the service road from the main carriage way of the trunk road. The condition was imposed on traffic grounds with the object of minimising the effect of frontage development on the flow and safety of main road traffic.

The Minister allowed the appeal and nothing discharged the condition. He considered ne photothat in the circumstances of the case the ained too requirement was unreasonable. If such a 'copy' to fence was required, this was a matter to e plaintiff be dealt with by the highway authority

ecided to under their proper powers.

of losing This is one of those cases which the legal emphasises what was said in the 'Drafting eeing the of Planning Permissions', that 'planning that the powers ought not to be used as a sort of he earlier universal longstop when other powers are not available'.

oming to It is instructive to read the appeals to pay published in the JOURNAL OF PLANNING ender his LAW as it is possible to get an idea of the result of an appeal. The JOURNALS of plaintiff's PLANNING LAW and CURRENT PROPERTY LAW are to be amalgamated as from 1 January next, and will be published under BONUS the title of THE JOURNAL OF PLANNING is often AND PROPERTY LAW. This should prove a ding con useful combination.

less there MINISTRY OF HOUSING AND LOCAL ompletion GOVERNMENT. Better use of the Country's Houses. The Fourth Report of for this the Housing Management Sub-Committee onclusion of the Central Housing Advisory Com-, it would mittee has now been issued and is obtain-R.I.B.A. able at H.M. Stationery Office, price because 1s. 9d. net.

use. That A copy of the Report has been sent to for many all housing local authorities in England afted by and Wales; the Minister concurs in its iquidated recommendations and commends it to the and sub-close consideration of the authorities. It lidity has deals with freer exchange of tenancies and e because a review of council house rents.

The Committee say that they grew more Court of and more aware not only of the importance extended of building new houses, but also of making spectively the best use of the 12 million houses Contract, already built in England and Wales, and of iquidated removing needless obstacles which may ssion on impede people from getting houses which he claim suit them-thereby helping to thaw and no bonus shift the countless people who now are case was frozen into wrong accommodation'. An educt the active policy of transfers (from one council ut £3,000 house to another) and exchanges (between act has council tenants and tenants or private mages for landlords) can achieve three valuable . It is no results: spare accommodation will not be wasted, people will be more contentedly housed, and local authorities will be more certain what sizes of council houses are needed. The Committee say that exchanges proposed by one or other of the tenants are more likely to be successful than those suggested by the landlord and that where direct exchanges would fail to suit one party or the other, the next step should be to examine whether the difficulty could be overcome by a three-cornered exchange.

Exchanges between tenants of local authorities and tenants of private landlords present the most difficulties, but also provide the greatest opportunity. Particularly valuable is the instance in which a landlord, on the council's rehousing his tenant, accepts a new tenant from the council's waiting list, or asks the council which of the people who are seeking the tenancy have urgent housing need.

Other recommendations on transfers are: When planning new estates, local authorities should include dwellings of different sizes and types, so that tenants may not have to move from familiar surroundings when they need a home of another size. Local authorities should reconsider any restrictions they now impose upon exchanges with a view to their removal; they should satisfy themselves that the families will be reliable tenants and that there are genuine housing reasons for the exchange. Local authorities should initiate discussions with private owners in their area on the means of overcoming difficulties in the way of suitable exchanges. Organisations representing those who own or manage private house property are asked to bring to the notice of their members the contribution they can make to the national housing problem, if they will work with the local authority in these ways. Local authorities should consider maintaining a list of people who want to exchange and making it available for inspection, to help families to arrange exchanges for themselves. Local authorities are urged to give wide publicity to their scheme for exchanges, and to consider how to employ improvement and conversion grants under the Housing Act 1949.

Timber (Control) (Revocation) Order 1953. Circular 66/53 dated 20 November 1953, addressed to all authorities in England and Wales, states that as from 13 November 1953 the Minister of Materials has made an Order freeing from control the acquisition, supply and use of softwood and of such types of hardwood as have remained subject to consumption licensing. Consequently, no licence will be required for the use of timber. All restrictions on the amount of softwood timber that can be used on building work, including new housing, are now withdrawn.

LAW CASES

Springett v. Harold. (Queen's Bench Divisional Court, 15 October 1953.) This was an appeal by a tenant from the decision of a magistrate under the Public Health (London) Act 1936, section 82. A sanitary notice was served on the landlord of a dwelling house on the ground that the walls and ceilings of some of the rooms were stained and peeling, as a result of which they were in such a condition as to cause discomfort and inconvenience to the tenant, and constituted a nuisance within the meaning of section 82 of the Act.

The magistrate found that the walls and ceilings of the rooms in question were in need of decorative repair but that they were not damp, verminous or injurious to health. Being of the opinion that mere want of internal decorative repair did not constitute a nuisance within the meaning of section 82 even if it did cause discomfort and inconvenience to the tenant, he dismissed the complaint.

The tenant appealed, and the Divisional Court dismissed the appeal saying that the case was unarguable. (CURRENT PROPERTY

LAW, November 1953.)

Warren v. Keen. (Court of Appeal, 9 October 1953.) This was an appeal by the tenant (a weekly tenant) from a decision of a County Court Judge holding him liable to repair the premises under an

implied covenant to repair.

The local council served a notice on the landlord of the house, which was let on a weekly tenancy, requiring defects to be remedied, which consisted mainly of defects due to decay of walls and failure to paint. The landlord carried out the repairs at a cost of £23 5s. Od. and sought to recover that sum from the tenant. The County Court Judge held that the tenant, in breach of an implied covenant, had allowed the condition of the premises to deteriorate, and gave judgment for the landlord.

In allowing the tenant's appeal the Court of Appeal said that there is no implied general covenant imposed on a weekly tenant to put and keep premises in repair. If the house falls into disrepair through fair wear and tear or lapse of time or for any reason not caused by the tenant he is not liable to repair. His only duty is to use the premises in a tenant-like manner, such as turning off the water and emptying the boiler if he is going away for the winter, cleaning the chimneys, mending the electric light when it fuses and unstopping the sink when it is blocked by his waste. In short, he must do the little jobs about the place which a reasonable tenant would do. The appeal was allowed. (CURRENT PROPERTY LAW, November 1953.)

Arbitration. Costs of the Reference. In two recent cases the Court have set aside the arbitrator's award so far as it related to costs because he had failed to exercise his discretion judicially. The Court said that it was a curious circumstance that lay arbitrators seemed to think that parties should always pay their own costs. In the absence of special circumstances a successful litigant should receive his costs, and it was necessary to show some ground for refusing an order which would give costs to him. Such discretion must be exercised judicially, which meant that the arbitrator should not act capriciously.

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Softwood Freedom

By Phillip O. Reece, A.M.I.C.E., Director, Timber Development Association Ltd.

EDITOR'S NOTE. Post-war architecture in Great Britain has been so conditioned by timber rationing that the recent liberation of softwood from control is likely to exert considerable influence on structure and design. While it seems unlikely that we shall go back to the 'good old days' of cheap and abundant first quality timber, a greater use of softwood in current building than in recent years is to be expected. We have therefore asked Mr. Reece to evaluate possibilities and trends.

On Friday 13 November 1953 the licensing system, which had controlled the consumption of softwood for 14 years, was formally abolished, together with all its attendant rules and regulations. Freedom to buy and sell, freedom to design and build, freedom to compete on the level terms of cost and performance—henceforth these freedoms are restored, but they are restored to a different world. The industrial pattern has changed in a decade and a half and it is unlikely that we shall pick up the threads precisely where we dropped them in 1939.

Before the war, the United Kingdom was the principal buyer of the world's timber. Her consumption per head of population was higher than that of any other pre-dominantly importing country. In value, timber headed the list of her imported raw materials; in tonnage her consumption was about half that of steel, nearly the same as that of cement and about 100 times that of aluminium. By 1948, the United Kingdom was the only country in the world who had not recovered her pre-war share of the world's timber and, although world production had by now exceeded the 1937 level, her consumption per head was the lowest in Europe, with the exception of Ireland and Hungary. Timber had fallen to fourth place in the values of her imported raw materials. Her consumption was only one-fifth that of steel, one-third that of cement and about 18 times that of aluminium. In ten years the British share of the world's exportable timber had fallen from over half to about one-quarter. Between 1937 and 1948, the consumption of softwood per head of population had fallen from 7.60 cu. ft. to 3.63 cu. ft., of plywood from 0.25 cu. ft. to 0.13 cu. ft., the only advance being in hardwood which increased from 0.91 cu. ft. to 1.21 cu. ft., the total consumption of softwood, hardwood and plywood together showing a decline from 8.76 to 4.97 cu. ft. per head.

This decline of the position of timber in British economy was in direct contrast with the rising scale of production in other essential materials and services. During the same period the output of electricity had increased by 100%, copper consumption by 20%, steel by 25%, cement by 20% and aluminium by 300%, while timber had decreased by nearly half.

These changes in production levels have been accompanied by changes in price levels. Taking 1937 prices as 100%, prices for 1948 in the building industry were as follows:-

| Wages | | 210% |
|----------------|-------|----------|
| Materials (ave | rage) | 216% |
| Coal | | 190% |
| Copper | | 309% |
| Steel | | 200% |
| Cement | | 153% |
| Aluminium | | 98% |
| Timber | | 378% |

In general, it will be clear that in the decade before 1948 timber had changed from being a relatively cheap and plentiful material, occupying a position of primary importance in British economy, to one which was relatively costly and scarce.

A study of the economy measures enforced to depress the level of softwood consumption will probably provide as good a guide as any to the future course of softwood's freedom. These may be described under three main headings:-

(1) Complete elimination: (a) by the prohibition of particular kinds of building; (b) by the use of substitute materials.

(2) Reduction in use: (a) by improved design; (b) by reduction of sizes and margins of safety; (c) by reduction of waste.

(3) Balance of consumption: (a) by the use of home-grown to save imported timber; (b) by the use of hardwood and plywood to save softwood.

In discussing the first of these headings we must, of course, recognise that our national preoccupation with housing has held back a great deal of social, cultural and recreational buildings ancillary to housing, in addition to much building essential to our industrial efficiency. This latter point has now been met by the raising of the licence-free limit on building in industry and agriculture from £2,000 to £25,000 as from 1 January next year. In churches, assembly, recreational and agricultural halls and buildings, softwood always found a place and will probably continue to do so in much the same way as before, while the development of modern research in timber, in the structural field particularly, has created new uses, not only in these buildings, but in the construction of the single-storey industrial building also.

With the new-found freedom of softwood we should perhaps give the term 'substitute' a decent burial, with all its vexed implications of enforced, virtually

subsidised, competition. From now on the men only criteria are cost and performance and, who although there are many uses to which softwood will return immediately, it is equally no certain that it will have to fight a long and By difficult battle to recover all its old markets. Stan

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In studying trends it is extraordinarily draw difficult to separate results of the normal, scan healthy competition of private enterprise Cod from those achieved by more or less to b statutory enforcement. Before the war the be v window industry, for instance, had already which reached a point at which about 40% of the windows used in housing were of time metal and about 60% of wood. By the end wood of the war the position had been reversed affer It is quite true that the bulk allocation rem system, in effect, favoured the metal grow window. Nevertheless, it would be extremely has hazardous to attempt to estimate what the was metal window industry would have achieved effer in the same time had there been no war the

The ground floors of houses present us of with quite a different case, however. Here before the use of softwood was prohibited and cha every possible incentive given to the search from for alternative materials and methods of pro construction. The higher cost of solid sale floors, their slowing down of building devoperations, their cold intransigence in the home-all were accepted as the price of the saving softwood. As a consequence, an We increasing range of floor covering materials ma has been developed, materials which might diff never have seen the light of day but for the on enforced scarcity of softwood. Whether dev they will withstand the immediate onslaught wo of timber will probably be decided by the on effectiveness of their advertising; whether wo they will remain a permanent feature of of our housing will certainly be decided in due has course by sober judgment of their rig performance.

The timber economies achieved by im- WI proved design are a double-edged weapon. de Their first effect is to reduce consumption for in essential building components; their ab second to increase, through competitive be design, the number of components built. This is well illustrated by the post-war T.D.A. roof which, by reducing the amount to of softwood used, made it almost impossible on for other materials to compete on cost. This de kind of timber economy has given considerable impetus to research and design by in timber-a fact which may yet prove ye decisive in the structural future of softwood. inc

The war-time economies achieved merely 99 by the reduction of sizes and margins of the safety are to be deplored. Many such ab economies were enforced through the an exigencies of the times. Others, while satisfactory and with a high standard of co

workmanship and supervision, are unsuited to conditions as we know them today. Fortunately, the Code of Practice for the Structural Use of Timber in Buildings is now firmly established and designers should no longer be in doubt as to the standards they should adopt. In spite of this, however-perhaps because of it-most of us will need a considerable amount of mental spring-cleaning before we can aspire to uninhibited design in timber. The developw on the ment of rational design methods has been ince and, wholly conditioned by the necessity for nich soft. economy in the raw material and this is by s equally no means a guarantee of good design. long and By far the greater part of current British markets. Standards for timber components have been rdinarily drawn up against the background of normal, scarcity and austerity, and even the relevant nterprise Codes of Practice, intended as they were or less to be Codes of 'good' practice, could not war the be wholly divorced from the conditions in already which they were produced. 40% of The use of home-grown to save imported

were of timber, and the use of hardwood and plythe end wood to save softwood, will necessarily be reversed. affected by softwood's freedom. We should llocation remember however that neither homee metal grown timber nor hardwood nor plywood extremely has ever enjoyed that full freedom which what the was needed to make its extended use wholly achieved effective. The import of hardwoods from no war the dollar area is still restricted, while plywood still carries the iniquitous burden resent us of the national stock. This means that, er. Here before an importer can get a licence to purited and chase the plywood he wants, he has to buy ne search from Government stock plywood he thods of probably doesn't need-'a condition of of solid sale' which is hardly inducive to brisk

building development. e in the It is true that the 'new' hardwoods from price of the Commonwealth sterling area-notably ence, an West Africa and Malaya-have enjoyed a materials market which would have been more ch might difficult to establish but for the restrictions t for the on softwood. Where this market has been Whether developed entirely at the expense of softnslaught wood, merely on account of the restrictions d by the on softwood, it is likely to revert to softwhether wood, but this is by no means the whole ature of of the story. Many of the 'new' hardwoods ed in due have established a market in their own of their right and would have done so sooner or later irrespective of softwood licensing. by im- While most of the world's industries weapon. demand softwood and most of the world's umption forests produce hardwoods, the inescaps; their able conclusion is that we shall gradually npetitive be forced to change our pattern of ts built. consumption.

The extent to which softwood is likely amount prossible one of the main factors influencing the decision to abolish licensing and the net result of the protracted investigations made by the Government was that in the first year of freedom consumption was likely to increase by 110,000 standards, or about 9% of current consumption. This means that consumption in 1954 is estimated at about 1,400,000 standards compared with the years 1933–37 and compared with the years 1933–37 and compared with the consumption of about 1,000,000 standards

which set the measure of our economy in the immediate post-war years.

The timber trade is well aware of the need to keep prices as low as possible, but judging by the evidence of other materials freed from government control it would seem prudent to expect some temporary increase, although current prices are acknowledged to be high and the margin between the estimated consumption of 1,400,000 standards and the supplies available for export to the United Kingdom should be sufficient to cushion the impact of increased United Kingdom buying. In considering prices it is as well to remember that although steel, cement and aluminium are all less than 24 times their pre-war cost, compared with softwood at 5½ times, softwood is still competitive over the greater part of its markets and on the face of it even a slight fall in price should be sufficient to extend its use so as to recover lost ground.

The general trend of technical development towards more efficient utilisation means, among other things, that outlets must be found for the poorer as well as the better qualities of softwood. World economy will not allow us to live on the cream of the forests any more than it

allowed the Red Indian to live on the tastier parts of the buffalo while the carcass was left to rot. Many of the older virgin forests have disappeared and an increasing amount of second growth must be utilised: that is to say, younger trees grown on the sites of the older forests, grown in the open with room to spread and retain their branches-and therefore their knots!throughout their growth; mere striplings of 50 or so compared with their 500-year-old predecessors, in shorter lengths, smaller diameters and with more sharply sloping grain. These are factors in our technological development and a number of solutions have already been found in lamination, jointing, grading, in seasoning and preservation and in a better understanding of our material. Research is hardly a generation old, but its results are substantial; they are at the disposal of the designer, and it rests with the designer to make the best use of them. As the world's capital deposits of minerals are slowly exhausted, man must turn more and more to nature's potentially inexhaustible forests; to the trees which, by reason of their longevity and wide distribution over the earth's surface, are the world's greatest and probably the world's last bulk suppliers of raw material.

Report of the Committee on Private Architectural Practice by Unqualified Persons

AT THE DESIRE of the Allied Societies' Conference, the Council at their meeting on 6 January 1953 appointed a Committee to consider the problems of the infringement upon private architectural practice by unqualified persons and to make such recommendations as to action that they might think appropriate. Membership of the Committee was drawn exclusively from members of the Council, and included a Vice-President as Chairman, the Chairman of the Allied Societies' Conference, the Honorary Secretary and Honorary Treasurer, R.I.B.A., the Presidents of five Allied Societies and three senior Official Architects.

After a number of meetings and the consideration of a considerable volume of written evidence, the Committee submitted their report to the Council and made a number of recommendations. The Council then referred the report and recommendations to the various standing Committees of the Institute who were concerned. At their meeting on 8 December 1953 the Council reviewed the whole matter in the light of observations made by those Committees.

The text of the report submitted by the Committee to the Council is published below, together with a summary of the recommendations considered by the Council and some notes on the Council's decisions and the action taken or in the process of being taken.

REPORT OF THE COMMITTEE

1. Definition of Unqualified Persons. There are many persons not registered as architects who earn their living by professional practice of a nature akin to architecture. At one end of the scale there is the chartered surveyor of long experience who concerns himself with war damage reinstatement and similar work which might be described as surveying; at the other end of the scale is individual with no pretensions to qualifications who prepares a plan in his spare time for a nominal sum. For the purposes of their inquiry, therefore, the Committee had some difficulty in formulating a definition of unqualified persons, and equally in drawing a clear line of demarcation between architectural and surveying work. They did not regard it as part of their duty to consider the first class of persons described above, except in so far as they will be concerned in the event of any extension to the Architects' (Registration) Acts. This matter is dealt with in paragraph 3 below. The Committee agreed that for general application to their inquiry the definition of unqualified persons should be those not registered or not having passed the Final or one of the exempting examinations.

2. Spare Time Private Practice by Architects in Salaried Employment. This matter again was not directly within the terms of the Committee's reference, though they thought it appropriate to recall the resolu-

tion passed by the Council at their meeting on 13 January 1948, approving the Joint Report of the Practice and Salaried and Official Architects' Committees on this matter.

The gist of it was that it was for the employing authority, rather than the R.I.B.A., to determine whether or not employees might undertake spare time work. Where they were allowed to, attention was to be drawn to the necessity of complying strictly with Clauses 4 and 5 of the Code of Professional Conduct, i.e. those clauses governing the nature of the activities which a member might undertake. A statement to this effect was published in the JOURNAL for February 1948. Arising from that resolution, a further amendment was made to the Code of Professional Conduct, Clause 12 of which now reads:—

'A member or Student employed as a full-time salaried and official architect by a central or local government department or by a statutory undertaking, and who is by reason of his office in a position to grant or influence the granting of any form of statutory or other approval, must not undertake private work notwithstanding any permission from his employing authority to do so, unless he is satisfied that his position and action in the matter will be free from any suspicion or suggestion of abuse.'

The Committee suggest that the general considerations discussed above apply equally to a salaried architect working for a principal in private practice. The decision as to undertaking work in his spare time must be a matter between himself and his principal.

3. Extension of the Architects' (Registration) Acts. The Committee have considered a number of letters from both Allied Societies, Branches and Chapters, and individual members advocating an extension of the Registration Acts designed to restrict the right to submit plans to registered architects. The Royal Institute's policy in regard to the Registration Acts is continuously under review by the Executive Committee and Council, and was discussed very fully at the Joint Meeting of the Council and Allied Societies' Conference held in November 1952. In the five years preceding that meeting it had been discussed on five occasions by the Allied Societies' Conference, as well as by the Executive Committee and Council.

The Committee have reviewed the various factors which must be taken into consideration in this matter. These are, broadly, the reactions of the public at large to any such legislation, the attitude of Parliament itself, and the degree of support that might be forthcoming from kindred professions. The Committee are satisfied that a great deal more preparatory work is yet necessary, especially in bringing the public to appreciate the advantages to be obtained by the employment of fully qualified architects.

Much the same arguments apply to the suggestion that an attempt should be made to persuade local authorities to withhold

approval from plans unless they have been prepared by architects. The Committee are advised that no statutory powers at present exist for such an action.

Action Practicable in the Immediate Future. Much useful work can be done in the immediate future under two main headings: (a) action to restrict the activities of the 'quack' practitioner (i.e. the man with no pretensions to architectural qualifications or experience who prepares plans for small projects at cut fees. The experienced surveyor or civil engineer working in his own special sphere is, of course, not included in this definition); and (b) action to bring more widely to the knowledge of the public the services provided by architects. The two headings are inter-related, since a greater appreciation of the full value in time and money derived from employing an architect will go far towards curtailing the activities of the quack.

5. Submission of Plans by Unqualified Persons. The Committee have evidence that the volume of such work is appreciable, varying between as much as 50 per cent of all plans submitted to local authorities in rural areas, down to perhaps 10 per cent in the bigger urban areas. It seems that though the number of submissions is considerable, the size of individual projects is small.

There are complaints from planning officers of the proportion of such plans which are unsatisfactory and need amendment or even complete revision, and much may be done if the client concerned is advised to have his rejected plans recast by a competent architect. The matter might be discussed at national level with the government departments concerned, and it might be suggested to panels, through the Central Panels Committee, C.P.R.E., that they should reject unsatisfactory plans, adding advice to the client to consult an architect rather than themselves attempt to amend them. Much more can be done at regional and local levels. Allied Societies, Branches and Chapters should make every endeavour to persuade local planning officers of the inadvisability of wasting the time of official staff in revising unsatisfactory plans. They should make available to such officers the names and addresses of architects in the neighbourhood and suggest that clients should be told to consult one with a view to getting the plans revised. Copies of the pamphlet 'Before You Build' should be available for handing to such clients.

The Committee have also considered an instance in which a member was approached by an unqualified person to revise an unsatisfactory plan and sponsor it for approval by a local authority, but to have no responsibility beyond this. Such an action is to be deprecated as an encouragement of the activities which the Royal Institute wishes to suppress, and members should be advised of this view.

6. Encouragement of the Employment of Architects. A wide field exists for increased endeavour in public relations work, by enlisting the aid of the press, by exhibitions and by contacts with those in positions to

influence the employment of architects on both public and private work. The R.I.B.A. a can do and does much at a national level in regard to the national press and broadcasting, and is in constant touch with the departments of State concerned with building, but it cannot deal effectively with the local press or directly with the numerous local authorities and private bodies concerned with building. The latter action must be taken by Allied Societies, Branches and Chapters.

7. Intensification of Public Relations Work at all Levels. The Committee are convinced that public relations activities are most fruitful when carried out at regional and local levels. As stated in paragraph 6, the Royz! Institute cannot reach the local press or local bodies, but Allied Societies, Branches and Chapters can achieve this both corporately and by individual contacts. The Committee learn that the response to the meeting convened by the Council in November 1951 to discuss public relations work has fallen short of expectations, and they stress the importance of the appointment of officers in all localities to specialise in public relations activities. They suggest that Allied Societies, Branches and Chapters should be urged to push ahead in this manner and that the Council should convene a meeting of public relations officers in about eight or tenmonths' time to discuss thoroughly the various problems in the light of the experience gained in the interval.

rela 8. Improved Liaison between Architects and local Builders at all Levels. There is an oppor-ther tunity for further employment of architects serv in collaboration with builders working on nam private projects, and there is evidence that wor builders generally welcome the appointment furt of an architect. The Committee suggest that office this matter should be discussed at ant national level by the Joint Consultative initial Committee of Architects and Builders, and T that Ailied Societies, Branches and Chapter end should be encouraged to follow the example have of one or two societies who have developed arra their ad hoc liaison committees whichfurt studied the report of the Anglo-American T Productivity Team into permanent con-that sultative committees for their particular assistance cove

9. Approach to Building Societies. There is has a field for the employment of architects by those who build private house the with the assistance of building societies. Wor The Committee suggest that approaches should be made, both to encourage the employment of architects and to discuss the possibility of building societies' in the cluding professional fees in the total sum and to be lent on mortgage.

RECOMMENDATIONS CONSIDERED IN BY THE COUNCIL

Arising from paragraph 5 of the Report he the Committee recommended that stepsuil should be taken to dissuade local authorities from permitting officials in public service or correct, amend or redraw unsatisfactor local plans submitted for approval, and to encourage those authorities to return such pea

itects on plans with a strong recommendation that R.I.B.A. a properly qualified professional man nal level should be employed by the building owner. d broad- The Council approved this recommendawith the tion, but expressed the view that effective th build- action could not be taken at national level with the by reason of the wide measure of autonomy umerous enjoyed by local authorities. It was thought lies con that the only effective means of making r action such representations was by local contact Branches between Allied Societies and the individual local authorities in their areas.

Arising from paragraph 8, it was recomns Work mended that the national liaison comonvinced mittee between architects and builders re most should go into the question of closer onal and collaboration between architects and oh 6, the builders at all levels. This recommendation he local was approved, and the matter discussed between the R.I.B.A. and N.F.B.T.E. The ieve this question is being pursued further, but it has been strongly reiterated that the most hat the discuss of achieving such liaison is on a regional and local basis by means of discuss short of the joint consultative committees set up fittees in productivity matters generally.

The suggestion made in paragraph 9 is

The suggestion made in paragraph 9 is relations in the process of being followed up by Societies, urged to that the of public of publ

The further recommendations made by

or ten the Committee were concerned with the ghly the importance of increasing activity by Allied the ex-Societies, Branches and Chapters in public relations work generally, close contact with tects and local authorities and information service to n oppor-them in the way of literature describing the architects services provided by architects and lists of rking onnames of architects available to undertake ence that work. It was also recommended that a ointmentfurther conference of public relations ggest that officers of Allied Societies should be held ed at aut the R.I.B.A. to follow up the work

isultative initiated in November 1951. ders, and These recommendations were cordially Chapters endorsed by the Council. Communications example have been sent to Allied Societies and leveloped arrangements are in hand for the proposed

s which further conference.

American The Council endorsed the suggestion ent con-that members should in no circumstances particular assist the activities of the unqualified by covering or sponsoring plans prepared by

There is them.

of archi- Detailed consideration was also given to e housesthe question of fees for private housing societies work, and it was agreed that the R.I.B.A. proaches scale of Professional Charges covers this urage the uestion adequately, regard being had to o discuss he application of quantum meruit coneties' in siderations for both normal partial services otal sum nd for those services involving less than the usual amount of detailed design and

upervision.

IDERED In approving the report of the Committee, he Council once again drew attention to Report he fact that the statutory administration of hat stepsuilding affairs is greatly decentralised in uthoritieshe United Kingdom, with a wide measure ic services autonomy given to local authorities. tisfacton ccordingly, the only effective approach and ton these matters must be regionally and turn suchocally.

Correspondence

THE CODE OF PROFESSIONAL PRACTICE

The Editor, R.I.B.A. Journal.

SIR,—One often wonders to what extent the letter and the spirit of the Code of Professional Practice is being observed in the profession.

The machinery involved in bringing cases before the Architects Registration Council appears somewhat complicated and this no doubt has the advantage of discouraging what might appear to be frivolous complaints. On the other hand, there are cases which undoubtedly would be taken up if there existed an easily accessible but small advisory panel which could express an opinion as to whether or not a prima facie case existed from the facts placed before it.

At the present time affidavits have to be prepared and sworn before the machinery begins to operate, and further legal

formalities are later involved.

In recent years I have encountered cases which I consider entail flagrant breaches of the Code. If a high standard of conduct is to be maintained in the profession, some action with a view to simplifying the process seems desirable.

Yours faithfully, A. HODSDON ARCHARD [F]

Editor's Note: We showed Mr. Hodsdon Archard's letter to Mr. Pembroke Wicks, the Registrar of A.R.C.U.K., who writes: 'Your correspondent's attention has evidently not been drawn to the Professional Purposes Committee of the Architects Registration Council who undertake the preliminary investigation of complaints as provided in the Rules of Procedure of complaints of unprofessional conduct which were drawn up by Counsel some years ago for guidance.

'The following extracts from these Rules are relevant to Mr. Archard's enquiry:

"The Professional Purposes Committee may be entrusted by the Architects Registration Council with the preliminary investigation of complaints of improper conduct by architects, made in any form, save where such complaints are made formally by affidavit under Paragraph 2 of the Disciplinary Regulations.

The Professional Purposes Committee are entitled to advise the Council in all cases of improper conduct not amounting to disgraceful conduct, and to make such recommendations as they think fit.

"If upon investigation it appears to the Professional Purposes Committee that a complaint is likely to involve conduct amounting to 'disgraceful conduct', the Professional Purposes Committee should cease their investigations and instruct the Registrar (i) either to invite the complainant to file an affidavit to the Council setting out the facts of the complaint, or (ii) to continue the investigation himself, or through the Solicitor or other authorised official of the Council with a view to the preparation of an affidavit."

A SPATE OF CIRCULARS

The Editor.

SIR,-I am surprised that this correspondence has not mentioned a further aspect of the spate of circulars, which appears on inquiry to have affected others beside myself. I am still receiving circulars forwarded from addresses which I have left several years previously, and in spite of notifications in the Press regarding change of address.

This appears to arise from two causes, first the inability of manufacturers to keep their own mailing lists up to date, and secondly the apparent reluctance of mailing agencies to use an up-to-date R.I.B.A.

Kalendar.

In spite of the fact that I have had many dealings with one firm from my present address, I am still receiving duplicates of all their literature at an address which I notified in the Press as no longer operative. I am mildly amused to see how long this will continue-particularly in view of the fact that this issue of the JOURNAL contains a further change of address.

And do partnerships find, like one I know, that catalogues arrive for each partner plus one addressed to the firm for

good measure?

RICHARD HENNIKER [F]

THE DOMESTIC WATER CLOSET

The Editor

SIR,—It is indeed puzzling that a difference should be ordained between four- and five-person households as to the placing of the W.C.

It was equally surprising to learn from a report of (I think) the B.M.A. that the separate W.C. was viewed with disfavour by the medical profession unless it contained also a washbasin; the supposition being that facility for hand-washing should be always prominently available.

This seemed such a reversal of the best contemporary practice that it provoked adverse comment when it appeared. Are we now to assume that five persons may have convenience and four sanitary

conditions?

Yours, etc., EDWIN GUNN [Retd. A]

WILLIAM RICHARD LETHABY

The Editor.

DEAR SIR,-I am studying the life of Lethaby and I should be grateful, Sir, if you would allow me to enquire, through your columns, whether any of your readers would kindly let me know if they have Lethaby's letters, drawings, or any other material likely to help in the study of him.

I am, Sir, Yours truly, BASIL WARD [F] Lethaby Professor, Royal College of Art, South Kensington, S.W.7.



Conditions of Engagement and Scale of Professional Charges

At their meeting on 8 December 1953 the Council approved a number of recommendations of the Practice Committee in regard to an overall revision of the R.I.B.A. Scale of Professional Charges. The booklet is in future to be entitled 'Conditions of Engagement and Scale of Professional Charges' and the revised Conditions and Scale are set out below. It should be noted that the application of the surcharge on final accounts for fees not exceeding £1,150 will be discontinued from the date on which the revised Scale comes into force.

In accordance with the provisions of Bye-law 38, the Council give notice that the revised Conditions of Engagement and Scale of Professional Charges will be confirmed by them at their meeting on 2 February 1954, subject to the consideration of any comments or criticisms which may be received from members. Such comments or criticisms are required in accordance with the above-mentioned Bye-law to be submitted within one month (i.e. 30 January) from the date of issue of this JOURNAL.

CONDITIONS OF ENGAGEMENT

- 1. (a) Members of the R.I.B.A. are governed by the Charters, Bye-laws and Code of Professional Conduct of the Royal Institute.
- (b) The Architect shall give such periodical supervision and inspection as may be necessary to ensure that the works are being executed in general accordance with the contract; constant supervision does not form part of the duties undertaken by him.
- (c) In cases where constant superintendence is required a Clerk of Works shall be employed for this purpose. He shall be nominated or approved by the Architect, and appointed and paid by the Client. He shall be under the Architect's direction and control.
- (d) The Architect shall not make any material deviation, alteration, addition to or omission from the approved design without the knowledge and consent of the Client.
- (e) The Architect has authority to give orders on behalf of the Client if such are necessitated by constructional emergencies, provided that the Client shall be immediately notified thereof.
- (f) The Architect shall, if requested to do so, at the completion of the work, supply free of charge to the Client drawings sufficient to show the main lines of drainage and other essential services. Copyright in all drawings and in the work executed from them will remain the property of the Architect.
- (g) The following Architects' charges do not include for Surveyors' work for which see clauses 13 to 18 which are those of the

Royal Institution of Chartered Surveyors adopted by the R.I.B.A.

(h) The employment of Consultants shall be at the Architect's discretion in agreement with the Client and the payment of their fees shall be a matter of arrangement between Architect and Client.

Where it is agreed to retain the services of a Consultant in no case shall the Architect's fee be reduced by more than one-third on the cost of the work upon which the services of the Consultant are retained, provided always that the Architect's fee on the cost of the whole scheme shall not be reduced by more than one-sixth.

(i) An engagement entered into between the Architect and the Client may be terminated at any time by either party upon reasonable notice being given.

SCALE OF CHARGES

- 2. New Works. For taking the Client's instructions, preparing sketch design, making approximate estimate of cost by cubic measurement or otherwise, preparing working drawings, specification, or such particulars as may be necessary for the preparation of bills of quantities by an independent Quantity Surveyor, or for the purpose of obtaining tenders, advising on tenders and preparation of contract, nominating and instructing Consultants (if any), furnishing to the Contractor two copies of the contract drawings, specification, or other particulars and such further details as are necessary for the proper carrying out of the works, general super-vision as defined in the Conditions of Engagement, issuing certificates for payment, and certifying accounts in respect of new works, exclusive of the services enumerated in Clauses 6 and 16, the charge is to be a percentage on the total cost of all executed works as follows:-
- (a) If the cost of the executed works exceeds £4,000 the percentage is 6 per cent.
 (b) If the cost of the executed works does not exceed £4,000 the percentage is 10 per cent in the case of works costing £200 graduated to 6 per cent in the case of
- works costing £4,000.

 (c) When work is executed wholly or in part with old materials, or where material, labour or carriage is provided by the Client, the percentage shall be calculated as if the works had been executed wholly by the Contractor supplying all labour and materials
- (d) In addition to a percentage on the total cost of executed works, the Architect is entitled to charge in respect of all works included in the tenders, but subsequently omitted, two-thirds of the charge which would have been payable had they been executed.

- 3. Variations of Charges. The Scale of (a) Charges may be varied by prior written on agreement between Client and Architect in respect of the following:—
- (a) Repetitive Works. In the case of corrections works of a simple repetitive corrections, the charge may be reduced by one-sixth.
- (b) Works to Existing Buildings. In the case of works to existing buildings a higher percentage is chargeable, not exceeding at twice the amount payable under the Scale for new works of the same cost, and depending upon the intricacy of the work fee
- (c) Other Works. In works in which of designs for fittings, furniture, decorations or garden work are main features, special fees adequate to the circumstances are chargeable.
- 4. Partial Services. In cases where the addresses and all reason, including the abandonment, deferable ment, substitution or omission of any but project and/or works, or part thereof, otak if the services of the Architect are terms minated, the charges in respect of the services performed are as follows:—
- (a) For taking Client's instructions and ampreparing preliminary sketch plans the illustrate possibilities of a site or cost of autoscheme the charge is on quantum meruit.
- (b) For taking Client's instructions, pregive paring sketch design sufficient to indicating the Architect's interpretation of the Client's instructions (but not in detail adequate to enable bills of quantities to be prepared and making approximate estimate of cosmatthe charge is on quantum meruit and shall not exceed one-sixth of the penetrope case may be) on the estimated cost dies such works.
- (c) For taking Client's instructions, proparing sketch design, making approximate estimate of cost by cubic measurement of cost by cubic measurement of cost by cubic measurement of cost ings, specification, or such particulars and particular a
- (d) If the project is abandoned during the preparation of the working drawings, that charge is two-thirds of the appropriator percentage on the estimated cost of succonworks less a quantum meruit charge food bringing the working drawings and others particulars up to the stage defined in Clause 4 (c).
- (e) In all cases where fees are assessed of the the basis of quantum meruit regard mucas be had to all relevant factors including the time occupied and the character and intricacy of the work.
- 5. Mode and Time of Payment. The Archantect is entitled to payment in stages the follows:—

Scale of (a) On the completion of sketch plans or written one-sixth of the total fees payable.

rehitect in (b) During the preparation of working drawings and other particulars instalments case o consistent with the amount of work repetitive completed by the Architect. duced by

(c) On completion of the said working drawings and other particulars, two-thirds n the case of the total fees payable less the amount of a higher any payments already received by the exceeding Architect pursuant to sub-clauses 5 (a) the Scale and 5 (b).

cost, and (d) The remaining one-third of the total the work fees to be paid by instalments as the building work proceeds consistent with the value in which of the said building work completed from ecorations time to time. es, special

ances are 6. Services not included in the Scale. Charges shall be payable in respect of any where the additional services involved in:-

es for any (a) Advising as to the selection and suitent, deferability of sites. Negotiating as to sites or n of anybuildings, surveying sites or buildings and hereof, ottaking levels and making surveys, measuret are terments and plans of existing buildings.

ct of the (b) Preparing drawings in addition to s:working drawings for the use of the Client, tions and and drawings for and negotiating with plans teground landlords, adjoining owners, public r cost of authorities, licensing authorities or others.

meruit. (c) Preparing varied working drawings to tions, pregive effect to alterations of the Client's o indicatinstructions affecting matters of detail after he Client the completion of the working drawings.

dequate to prepared (d) Negotiating building or other licences, te of cos making town planning, bye-law or other arruit an applications, and negotiations in conthe pernection with Party Walls, Rights of Light 3 (as thand other easements, reservations or ed cost drestrictions.

(e) Litigation, arbitration or valuation.

proximal operations due to causes outside the control of the Architect.

ticulars and Surveys. For making inspection, preparation paring reports or giving advice on the ndepender structural or sanitary condition of premises, purpose the charge is on *quantum meruit* in two-third accordance with Clause 4 (e).

mated cols. Litigation and Arbitration. For qualifying to give evidence, settling proofs, conduring therences with Solicitors and Counsel, awings, thattendance in Court or before Arbitrations appropria or other tribunals, and for services in ost of succonnection with litigation, the charge is charge spased upon the time occupied, but is in no and otherase to be less than 10 guineas per day.

defined Architects acting as Arbitrators are recommended to base their charges upon assessed the total time occupied in dealing with a egard mutase at the rate of 3 guineas an hour cluding texclusive of out-of-pocket expenses and racter another disbursements.

Dilapidations. For preparing schedule The Archand settling the amount if required, the stages tharge is 5 guineas per cent on the amount of the settlement, or on the estimated cost of complying with the Schedule. (Minimum fee, 5 guineas.)

10. Travelling Time. An additional charge may be made if the work should be at such a distance as to lead to an exceptional expenditure of time in travelling.

11. Time Charges. In cases in which charges are based upon time occupied the minimum fee is 1½ guineas per hour exclusive of charges for Assistants' time. The minimum charge per hour for a Senior Assistant's time shall be 1 guinea, and for a Junior Assistant's time ½ guinea.

12. Expenses. Fees, in all cases, are exclusive of the cost of appliances, extra copies of drawings and documents, lithography, travelling and hotel expenses and all other reasonable disbursements, which are to be charged in addition to fees.

NOTE: The following Clauses are in accordance with the Schedule of Professional Charges of the Royal Institution of Chartered Surveyors and are adopted by the Royal Institute of British Architects.

13. For Approving Plans Submitted by Lessees and Inspecting Buildings During Progress. (Clause 9 of existing Scale to be revised as follows to accord with the latest issue of the R.I.C.S. Schedule of Professional Charges.)

£500 .. 2 guineas per cent. On the first next £1,500 .. $1\frac{1}{2}$,, . ..

" £18,000 .. 1 guinea £80,000 .. ½ ,, due .. ¼ ,, 22 residue (Minimum fee, 4 guineas.)

Note: This scale is intended to apply to normal cases. It should be applied with discretion and may be varied in either direction to meet exceptional circumstances.

14. The Laying Out or Development of Estates. (As Clause 10 (a) of existing Scale.)

15. For Land Surveying and the Preparation of Plans and Maps. (As Clause 10 (b) of existing Scale.)

16. Preparing Bills of Quantities and Valuing Work Executed. (Clause 11 of existing Scale to be revised by the inclusion of the following paragraph under Sections I and II to accord with the latest issue of the R.I.C.S. Schedule of Professional Charges.) For adjusting variations of price under any fluctuation of price (labour and materials) clauses of the contract: 2½ per cent upon the aggregate of the amount of the increases and/or decreases.

17. Valuation of Freehold or Leasehold Properties. (As Clause 12 of existing Scale.)

18. Work under the Lands Clauses Consolidation Act or other Acts for the Compulsory Acquisition of Property. (As Clause 13 of existing Scale.)

NOTE: Attention is drawn to the Schedule of Professional Charges issued by the Town Planning Institute which covers fees for Town Planning work.

Book Reviews

English Furniture. The Georgian Period (1750–1830), by Margaret Jourdain and F. Rose. $11\frac{1}{4} \times 9$ in. 210 pp. incl. pls. Batsford. 1953. £3 3s.

The discovery of mahogany, which began to be regularly imported into England from about 1715, gave a great impetus to English furniture; for the strength of this new wood enabled the legs and arms of chairs to be wrought slender and the large-sized single plants permitted the leaves of tables to be made without a join. Also, mahogany was an unusually hard wood, which enabled the carving to be crisp, and the beautiful grain made the best veneers. Cabinet-makers were delighted with it, and the leading London craftsmen such as Chippendale, whose rich patrons gave them all the scope they needed, began to make the most elegant furniture in the world.

There were other cabinet-makers just as creative and as flourishing as Chippendale in the middle years of the 18th century, but Chippendale's catalogue of designs has preserved his name for posterity. William Vile for example, who held the royal warrant but who left no such record of his work behind him, is only known as the maker of a few pieces of superb furniture. Hepplewhite had a better fate, for his widow by chance or foresight followed Chippendale's example of bringing out a trade catalogue. Sheraton, our third famous name in the history of English furniture, is rather a different case: he was not a furniture-maker but a writer and designer. But he, too, through his books, is remembered and identified with a certain

These are the names that were first mentioned when the subject of old English furniture was first studied in the seventies and eighties of the last century. Then and for a long time afterwards everything was either Chippendale, Hepplewhite or Sheraton. As there was no name to hang all the Charles II or Queen Anne furniture upon, matters at this earlier date were not so satisfactory. Clocks could be attributed to their makers with more accuracy because, like French furniture, they were signed.

In spite of this, headway was made into the great unexplored territory of the English wood crafts of the 17th and 18th centuries. One of the first serious explorers was the late Margaret Jourdain, whose conscientious researches brought forth a mass of social and biographical information. She delved into memoirs, letters, bills and so on—the list of sources of material about domestic gear is very long.

Not the least of her many writings is her English Decoration and Furniture of the Later XVIII Century (1760-1820) which was published in 1922 in the 'Library of Decorative Art', a 4-volumed series which included at least another work from her pen. Both these works have now been republished: the first deals with English interior decoration and covers three centuries from 1500; it appeared in 1950. The author intended that the companion volume should cover the same periods, but unfortunately she died before she could

complete it.

English Furniture, the Georgian Period tells us nothing new, but it covers the ground: here is variety and here is richness of furniture. It is, though, regrettable that the illustrations should be so poor and not a patch on those in the original edition. R. W. SYMONDS [F]

The English Farmhouse, by Martin S. Briggs. (The New Heritage series.) 83 in. incl. pls. and pp. of illus. Batsford. 1953.

An attractive book, intended more for the general public than for architects or farmers, its outlook is entirely retrospective and aesthetic, and wide enough to gather almost any building set in open country: and its illustrations range far beyond the promise of the title. Not only do they include such expansive 'farmhouses' as Markenfield Hall, near Ripon, and Little Moreton Hall, Cheshire, but numerous dovecotes, barns, and ancillary buildings as well. Not the least attractive feature is a number of the author's decisive pen drawings in the text, but architects may be irritated by the recurrent use of inverted commas singling out common technical

Mr. Briggs treats his subject under six regions, according to style resulting from local materials, and appears to favour magpie work and the gritstone building of the north. He makes lavish use of quotation, pages at a time, from well-

known novels.

I have a personal grievance in the neglect of Somerset; one of the few examples cited, the medieval house and barn at Preston Plucknett, is wrongly captioned 'Wilts', and no mention is made of Bratton Court, or of the strange domed dovecot at Blackford, near Minehead. The text reference on p. 96 to fig. '55' should read '45'.

It would have been interesting to have views on the prevalence of moats in the brick districts of East Anglia. One theory is that they fulfilled four objects; to furnish clay for brickmaking, water reserve in drought, fish for table, and sewage outfall! In some cases a duckpond has undoubtedly satisfied the first-named object, and I have found the second and fourth in simultaneous operation as recently as 1920.

F. G.

Three Revolutionary Architects, Boullée, Ledoux, and Lequeu; by Emil Kaufmann. (American Philosophical Society, Trans., N.S., vol. 42, pt. 3.) 11\(\frac{1}{4}\) in. \times 9\(\frac{1}{4}\) in. 136 pp. incl. pls. text illus. Philadelphia. 1952. \$2.00.

We undoubtedly owe to Dr. Kaufmann the discovery of the French revolutionary architects, Boullée, Ledoux and Lequeu. These architects, Dr. Kaufmann is anxious to point out, are called 'revolutionary', not because they were architects of the Revolution, but because their thought and designs constituted a complete break with

the architecture of the preceding Baroque period and foreshadowed the things to

Twenty years ago Dr. Kaufmann first gave expression to this idea in his Von Ledoux bis Le Corbusier; and even earlier, in 1929, he had drawn attention to the extraordinary designs of Boullée. Since then these architects, and especially Ledoux, have also become acknowledged prophets in their own countries; a number of articles have appeared on Ledoux, even a fulllength monograph, based largely on Dr. Kaufmann's publications and stealing, as

it were, much of his thunder.

The work under review is the first publication to deal exhaustively with the protagonists of the movement. It gives the architects' biographies, discusses their work in detail and illustrates their buildings and designs profusely (284 illustrations in all). The chapter on Boullée, the oldest of the three, is preceded by a full and very fascinating account of his teachers Blondel, Boffrand, and Le Geay, and an excursus on Abbé Laugier and his influence on later 18th century architecture. Blondel is represented as an artist standing at the crossroads, deprecating the most recent past, especially the Rococo, as well as the incipient historicism of the period; Dr. Kaufmann's attempt to make him also a prophet of the Modern Movement is not very successful, particularly because the English translation of Blondel's text seems at times to be guided by wishful thinking rather than by grammar. But a fuller treatment of this problem, for which we can hope in Dr. Kaufmann's next work, Architecture in the Age of Reason, will certainly be rewarding. So, too, would be the fuller treatment of the work of Le Geay, an obscure and peculiar artist, whom Dr. Kaufmann suspects of having been an influence on Piranesi-possibly even the cause of the Venetian's change of style on his coming to Rome, where he met Le Geav.

No greater stylistic contrast can be imagined than that between Blondel and Le Geay, and this contrast occurs also in the work of the first two architects discussed in this book, though hardly in the third, Lequeu, who seems to me to be wholly a Romantic. The author is fully conscious of the problem: 'Expressiveness and individualism were also the aims of the rising romantic movement. Revolutionary architecture differed in that its creators were hostile to revivalism of any kind and in principle they rejected any imitation of the past. In reality, of course, the different currents crossed constantly and in many of the revolutionary works reminiscences of the Baroque, as well as traces of Romanticism, are to be found.' Still Dr. Kaufmann clings to the idea that Boullée was wholly preoccupied with the geometrical-the 'natural'-only: 'How could the elementary geometrical shapes be reconciled with picturesqueness? He lived in the illusion that he was able to reach the impossible, to reconcile the irreconcilable.'

One cannot help feeling, however, that

if only Dr. Kaufmann would give up his idea of connecting these architects with modern architecture, irrespective of the rights or wrongs of the case, and concentrate on an analysis of their work in their own rights-a task for which no one is better qualified-highly interesting results, illuminating a very important chapter of architectural history, could be obtained.

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Built in U.S.A.: Post-War Architecture. Edited by Henry-Russell Hitchcock and Arthur Drexler. (Museum of Modern Art, New York.) 10 in. 128 pp. incl. pls. and pp. of illus. text illus. New York: Simon & Schuster [1952.] £1 10s.

Nearly ten years ago the Museum of Modern Art published Built in U.S.A.: 1932-1944, summing up the modern architectural movement there prior to World War II. This book treats with the great post-war flowering of architecture in

the U.S.A.

The mode of selection is, as Philip C. Johnson points out in his preface, a departure from the Museum's usual oneand indeed from that which official bodies in this country use-namely by committee. An advisory committee was appointed div and expressed individual preferences, but Str the final selection was left to Professor Vo Henry-Russell Hitchcock in order 'to cer avoid compromises and to sharpen the the specific flavour of the selection'. This wr choice has caused considerable disagree- of ment in certain circles, notably those par around Frank Lloyd Wright (who has only fur four buildings, or nearly 10% of the sui contents devoted to his work).

There is, in spite of this, much to be a resaid for this method of selection and if it is biased in favour of what is known as the A 'International Style', it is just because it is Str that style which has shown most development since the war-as witnessed by the Th U.N. Building, Lever House, Johnson his Wax Laboratory Tower, Racine, the buildings of Mies Van der Rohe and Richard in

Neutra.

The choice cannot have been easy and, is t knowing many of the buildings well, I sci think it is both discriminating and just, and concerned as it is with quality of concept Ha and execution. The real difficulty arises and from the tremendous surge of building on (much of it good) taking place in the U.S. con and the unbearable publicity every new of building gets, almost from the moment a are client approaches an architect-all of Str which precludes any book on new buildings mo these days being 'up-to-date'. There has to be in fact an artificial and arbitrary Re dead-line, and most of the buildings con illustrated here are prior to 1951. for

However, I venture to suggest that many for of these are not important merely because me they illustrate certain characteristics and thi qualities present in post-war U.S. building, of but because they are individual milestones in (Ta a great formative era—similar to that of int Europe in the 1920's and 1930's—and thi will have a permanent significance. It is a great pity the plans are not both clearer to and larger, but then this is largely a picturepro

book, and of the pictures there are no complaints. I had been going to suggest up his how sad it is that we never seem able to achieve such fine reproduction until I n their noticed that the book was produced by a one is London firm and printed in Norwich. The offset lithographic process used gives almost another dimension to these superb FELLO ATKINSON [4] pictures.

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Oxford Observed, by Thomas Sharp. 9 in. \times 7 in. 56 pp. incl. pls. text illus., Country Life. 1952. 12s. 6d.

Dr. Sharp contributes a personal appreciation of the qualities of Oxford townscape, based on a highly intriguing analysis of a number of carefully chosen photographs of streets and colleges. It is an exercise that can be applied to other and possibly less rewarding urban scenes, and he invites us to try it.

Building Science, etc., by Alfred G. Geeson. Vol. III, Structures. $8\frac{1}{2}$ in. ix + 412 pp. text diags. English Univs. Press. 1953. £1 7s. 6d.

The introductory volume of this useful series of books by Alfred Geeson [F] was divided into three sections-Materials, Structures and Equipment of Buildings. Volume III, with which we are now concerned, is a continuation and expansion of der 'to en the the second of these sections, and has been . This written with the examination requirements of architectural and building students isagreethose particularly in mind. It deals with the as only fundamentals of the subject and is not of the suitable for the structural specialist, who clearly needs a more detailed treatment of to be a narrower field of study.

n as the use it is A History of Civil Engineering, by Hans Straub. E. Rockwell, trans. xviii + 258 pp. + pls. Leonard Hill. 1952. £1 5s.

by the This book attempts to cover the whole Johnson history of building sites, operations and e build- materials, from the earliest organised works Richard in Egypt simultaneously with all the developments of building science. Its scope sy and, is thus comparable with that of the popular well, I scientific works of Hogben, H. G. Wells nd just, and Sawyer, but, unlike these authors, concept Hans Straub starts with no axe to grind, y arises and does not put forward any conclusion building on his labours. The names of the latest the U.S. contributors to the present concentration ery new of knowledge available to the civil engineer oment a are quoted and, in general, allowing for -all of Straub's continental bias, his knowledge of buildings modern practice is good. nere has In analysing methods since the Industrial

arbitrary Revolution the author has methodically buildings connected the development of a technique, for instance, welding, with a particular at many form, e.g. the Vierendeel girder bridge. He because mentions that there have been failures with tics and this type. A suspension bridge, using cables building, of high tension steel, collapsed in 1940 stones in (Tacoma), and it would have been most that of interesting to have been told more about

0's-and this. . It is a The history of the philosophical approach n clearer to mechanics might have been 'cut' to a picture provide space for such fuller examination. The author gives the full and successive theories of Galileo, Leibnitz and Mariotte on the bending forces set up in a beam, with the solution of Coulomb. He mentions Galileo's Discorsi as a work, like that of Aristotle, on a technical subject still read by his countrymen today for its literary

An account is given of an investigation undertaken by 'three mathematicians' in 1742 into the stability of the dome of St. Peter's; of interest in that remedial measures were taken based only on their findings. Their examination was correct on the causes of defects which lay in the elongation of the iron chains, but they were ignorant of the resistances of a material, iron, used in tension, which grows with the elongation, and were not quite accurate in their subsequent balancing of an elastic factor with a static factor. They took no account of Hooke's Law.

Wren (whose relationship with the Royal Society is mentioned only in a footnote) was faced with similar difficulties. As is well known, he added a brick cone to St. Paul's, making with the domes an inverted catenary form. His strength, in comparison with these Italians, lay in his power to anticipate and cut down the factor of which he was uncertain, the tensile members.

The author, writing in Rome, applauds Fontana's town-planning. He claims credit to engineers for similar modern attempts in 'landscaping' of projects. This deference to aesthetics may assume no more than a negative form in the vast anonymous civil engineering scheme, but he pays tribute to Maillart and Nervi as designers capable of giving an architectural quality to utilitarian structures. CECIL J. SEARLE [A]

The Complete Law of Town and Country Planning, by H. A. Hill. 4th ed. 1949: Second (Cumulative) Supplement, by D. P. Kerrigan, R. G. C. Davison and I. D. James. 93 in. Butterworth. 1953. £2 5s. (main work and suppt. £4 15s.).

The publication of this Supplement brings the law of town and country planning up to date, and, read in conjunction with the main volume, provides a comprehensive treatment of the subject. Besides those Acts which have come into operation since the 1947 Planning Act, there are included statutory instruments issued up to the end of 1952. The Act of 1953, which abolished development charges, is referred to, and the law before 18 November 1952 and after that date is explained.

Town planning legislation to the layman is not easy to understand, but as a book of reference it should be useful to those whose practice demands a more than general knowledge of the subject.

Knight's Annotated Model Byelaws. Vol. I-Buildings. Comprising the model series . . from the Ministry of Housing and Local Government, etc. 10th ed. 9½ in. xi + 194 pp. Charles Knight. [1952 or -53.] Price

The last edition of this book was published in 1938, since when great changes have been made in methods of building construction. To meet these the Ministry of Housing and Local Government issued in 1952 a revised edition of Model Bye-laws, and this 10th edition of the Annotated Model Bye-laws has in consequence been published, dealing with Buildings.

There is a useful introduction relating to the deposit of plans and the power of the local authority in regard to rejection of an application. The application of the Public Health Act 1936 is also included, as far as it relates to bye-laws. The position regarding habitation certificates is made

The model bye-laws are then set out with explanatory notes and, where two or more bye-laws have to be read together, this is indicated by a stroke. The bye-laws in italics are "deemed to satisfy" clauses which need not necessarily be followed, but such clauses are most useful and should help both local authority and architect. It is an indication of the flexibility of the new model.

Law cases are included under a model bye-law, that is where a bye-law has been previously interpreted by the Court. It would be necessary to compare the wording of a new bye-law to ascertain whether such an interpretation would be

applicable. An important addition to the Model is that relating to fire resistance of forms of construction. An explanatory note is put into the model, and local authorities are recommended by the Ministry to put this note into their bye-laws. This annotation gives useful guidance on this point and can be commended to those who have to work to the bye-laws. It may even be that the local authority would derive some benefit from a perusal of the notes under this heading, as teething difficulties are sure to arise.

The Ministry have recently issued a new edition of Model Building Bye-laws which is substantially a reprint of the 1952 edition. Six bye-laws relating to elevation of sites and factory chimneys have now been put into an appendix because, in practice, they are seldom used. In consequence of the new edition an eleventh edition of the annotation is available.

Local authorities should have amended their bye-laws by 31 December next, and until that time the Ministry hopes that regard will be had to the new model byelaws in dealing with applications. The annotation should be of assistance in this respect and should enable practitioners to become familiar with new bye-laws before they become available in their particular district and it should be a book of reference after that date.

The Architect in Practice, by Arthur J. Willis and W. N. B. George. Crosby Lockwood, 1952.

A supplement to this volume, reviewed in the August 1953 issue of the JOURNAL, is obtainable from the publishers, price 6d. It contains amendments to regulations, etc., up to August 1953 mentioned in the

Membership Lists

ELECTION: 8 DECEMBER 1953

The following candidates for membership were elected on 8 December 1953.

AS HON, CORRESPONDING MEMBER (1)

Artucio: Professor Leopoldo Carlos, Montevideo, Uruguay, S. America.

AS FELLOWS (14)

Bath: Charles George, A.M.T.P.I. [A. 1935]. Compton: (Mrs.) Audrey Mary, A.A.Dipl. [A 1935], Bognor Regis. Edwards: Percy William, A.M.T.P.I. [A 1937],

Chippenham.

Ellis: Jack, [A 1922], Birmingham. Fedeski: Henry, A.M.T.P.I. (R.I.B.A. Diploma in Town Planning) [A 1934], Leamington Spa. Howe: Jack, [A 1935].

Jack: William Archibald Park, [A 1949], Glas-

Kerr: Frederick Henri, [A 1946], Castletown, Isle of Man.

Knight: Thomas William, [A 1935], Oxford. Lawson: Richard Donald, Dip. T.P. (Manchester), A.M.T.P.I. (R.I.B.A. Diploma in Town Planning) [A 1936], Reading. Young: Robert Robertson Reid, B.Arch. (L'pool),

Dip.C.D. (L'pool) [A 1937], Liverpool.

And the following Licentiates who have passed the qualifying examination:-

Bellis: Gwilym, Wrexham. Jacobson: Zalik. Moore: Edwyn Walter.

AS ASSOCIATES (118)

Ablewhite: John Gardner. Andrews: Arthur Gordon, Ripley, Surrey. Atkinson: Robert Ingham, Bradford. Bartlett: Patrick Arthur.

Beveridge: James, D.A. (Edin.), Edinburgh. Blyth: John Allan, D.A. (Edin.), Edinburgh. Bourke: Sylvester William, B.Arch. (N.U.I.

Dublin), Kilkenny, Eire. Brady: Lawrence Henry.

Brown: David, D.A. (Dundee), Cupar. Burkett: John, Chislehurst.

Butcher: (Mrs.) June Margaret, Hatfield. Coles: Robert John, Coventry. Covington: John Stenton, Chichester.

Crease: David Plaistow, B.A. (Cantab.), D.A. (Edin.), Beckenham.

de Beaumont: Robert Henri Louis-Charles, B.A. Arch.(Cantab.).

Devine: Edward Allison, [L], Catterick.

Dorward: Ivor Gardiner Menzies Gordon, D.A. (Edin.), Currie.

Dowling: Robert Bryan.

Dunn: David Vaughan George, Dip. Arch. (Manchester), Oldham.

Edwards: Dennis Gordon, Nottingham.

Eisner: Hans Gunter, B.A. (Arch.) (Manchester), Manchester.

Evans: Michael Houching, Leigh-on-Sea. Farthing: Leslie William.

Fleming: John, Muckamore. Fletcher: John Willoughby.

Ford: William Arthur, Richmond, Surrey. Franklyn: Donald Henry, Southend-on-Sea. Funnell: John Martin, Dipl.Arch. (Northern Polytechnic), Sanderstead.

Garde: Robert Christopher Roger, Cork. Gossling: (Miss) Margaret Hilary, B.Sc.(Arch.)

(Glas.), Glasgow. Gower: Peter James Antony, Dip.Arch. (Birm.), Shifnal.

Gowers: Colin Anthony Barrett.

Graham: Alan Murray. Graham: John Anthony, B.A.(Arch.) (Manchester), Harlow.

Gray: George Beaumont, D.A. (Edin.), Stirling. Gray: William, Stirling.

Green: Ronald Arthur, A.A.Dipl.

Grogan: (Mrs.) Helen, Dip.Arch. (The Poly-

Harrison: David Ronald.

Harrison: Michael John Edward, Birmingham. Hay: Charles Dewar, Kirkcaldy.

Henry: John Vanstone. Herd: Robert Dallas, Thurso.

Heywood: Michael, Dip.Arch. (Leics.). Holden: Robert Patrick Evelyn, Grays.

Hudson: Albert Cornelius Charles. Hyslop: William, Leyland.

Jack: Thomas Kenneth, B.A. (Cantab.). Jackson: Victor, B.Arch. (L'pool), Bakewell. Jenkins: Frederick James, D.A. (Edin.), Stirling. Johnston: Marcus MacDonald, D.A. (Edin.)

Dunfermline. Jones: Gwilym Richard, Dip.Arch. (Manchester), Nevin.

Keatley: Robert Aubrey, [L], Wallington. King: Reginald Percy Richard, Southend-on-

Sea Kirkwood: Martin Fraser, Dip.Arch. (Abdn.), Beauly.

Laird: (Miss) Elizabeth Anne, D.A. (Dundee), Dundee.

Landau: Royston Simeon.

Landles: Andrew, D.A. (Edin.), Edinburgh. Latham: James Edwin, B.Arch. (L'pool), Liverpool. Lawrie: John Mackay, Dip.Arch. (Abdn.),

Dingwall.

Leiper: Robert, Dip.Arch. (Abdn.), Aberdeen. Liley: Peter Horbury, B.A.(Arch.) (Manchester), Ashton-under-Lyne.

Lowrie: (Miss) Joyce Mary, Welwyn Garden

McCormick: James Morrow, D.A. (Edin.), MacEwan: Donald, Dip.Arch. (Leics.), Oak-

Macfadyen: Neil, Tonbridge.

Macfarlane: Stephen Grant Parlan, Mold. Mackenzie: Samuel, Troqueer. MacLaughlin: (Miss) Anne Felicia, B.Arch.

(N.U.I. Dublin), Foxrock. MacManus: Owen Patrick, Mount Merrion.

Maguire: Robert Alfred. Mason: Richard Anthony, Stoke-on-Trent. Matheson: Allen Short, D.A. (Edin.), Edin-

burgh. Matthews: Peter, A.A.Dipl., Woodford. Mawson: Charles Leslie, Bradford. Mendenhall: Reginald Alfred, Slough.

Miller: Alexander Moncur. Mochrie: Allan John, B.Sc.(Arch.) (Glas.),

Glasgow. Naismith: Robert Wood, B.Sc. (Glas.), Cocken-

Nelson: Richard, Leicester. Nicholas: Victor Albert, Oxted.

Nixon: Peter Edward, Dip.Arch. (Manchester), Newcastle, Staffs.

Oakley: David John.

Pickard: Malcolm Stevens, Hull. Poole: Kennard Melville, B.Arch. (C.T.). Poole: Michael Verity, Westbury-on-Trym Powell: Clifford, Dip.Arch. (C.T.), Dip.C.D. (L'pool), Liverpool.

Powell: Richard Malcolm. Raimes: Alan Sleight.

Redpath: William John Coventry, D.A. (Edin.), South Queensferry

Rogers: Howard Cleveland, Sheffield. Sampson: George Henry, Chatham.

Scott: Kenneth, B.A. (Sheffield), Scunthorpe. Sewell: Clare Arnold, Dip.Arch. (The Polytechnic).

Shailer: Phillip Francis. Sheehan: Edward, D.A. (Edin.), Edinburgh. Simpson: Harold, D.A. (Edin.), Edinburgh.

Smith: Lloyd Allan, A.A.Dipl.

Smith: Matthew Fyfe, Glasgow. Smith: Stanley Alfred.

Staughton: Ronald Albert. Tasker: Douglas Maughan, Newcastle upon A

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Tyne. Thulborn: Albert Richard, West Wickham. Tucker: David William, Loughborough.

Tunbridge: Colin, Byfleet. Vaughan: John, B.Arch. (L'pool), M.C.D. Liverpool.

Waldock: Brian David.

Walker: Norman Charles, B.A. (Cantab.), D.A. (Edin.), Edinburgh. Waskett: Arthur Henry John, Bagshot.

Watts: Fraser Herbert Weatherill: Leonard Walter. White: Leonard George.

Whiteley: Peter Bryan. Wild: John Kenneth, Stoke-on-Trent. Wilson: Ronald John Aitken, Dunoon.

Winter: John Anthony, Norwich. Woodgate: Cyril, Dip.Arch. (Cardiff), Bristol. Wynne: Joseph Frank, D.A. (Dundee), Dundee.

AS LICENTIATES (6)

Woolams: Percy Albert.

Christie: Andrew George, Gateshead. Clague: John Charlesworth, Herne Bay. Jackson: Charles Edward, Blackpool. Simpson: Arthur, Bradford. Walker: Charles Herbert.

ELECTION: 2 FEBRUARY 1954

An election of candidates for membership will take place on 2 February 1954. The names and addresses of the candidates with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Bye-laws, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary R.I.B.A., not later than Saturday, 9 January

The names following the applicant's address

are those of his proposers.

AS HON, FELLOW (1)

Halifax: The Right Hon. The Earl of, K.G. O.M., G.C.S.I., G.C.I.E., Garrowby, York. Proposed by the Council.

AS HON. ASSOCIATES (3)

Baker: Professor John Fleetwood, O.B.E., M.A Sc.D., D.Sc., M.Inst.C.E., 100 Long Road, Cambridge. Proposed by the Council.

Montgomery: (Mrs.) Molly Audrey, Snells Farm, Amersham Common, Bucks. Proposed by the Council.

Trueman: Sir Arthur (Elijah), K.B.E., D.Sc., F.R.S., 21 Audley Road, W.5. Proposed by the Council.

AS FELLOWS (9)

Cowie: James Macneil, D.A. (Glas.) [A 1939], Oakfield Chambers, Motherwell, Lanarkshire; 49 Stewarton Drive, Cambuslang, Lanarkshire. N. R. J. Johnston, R. M. Noad, T. J. Beveridge. Galbraith: Thomas McKay, [A 1927], Messrs. Scott and Clark, Lower High Street, Wednesbury, Staffs.; 104 Stafford Road, Bloxwich, Walsall. R. C. Gifford, C. E. M. Fillmore, Harry Cherrington.

Hanly: David Patrick, B.Arch. (N.U.I. Dublin), A.M.T.P.I. [A 1943], Town Hall, Dunlao-ghaire, Co. Dublin, Ireland; 'Eagle Lodge', Rathgar Avenue, Dublin. Vincent Kelly, Rathgar Avenue, Dublin. J. V. Downes, J. J. Robinson.

Hill: Henry Alexander, Dip.Arch. (Dunelm) [A 1936], Messrs. T. A. Page, Son and Hill, 68 Sunderland Road, South Shields. T. A. Page, W. J. Scott, G. T. Brown.

McColl: Samuel, [A 1934], County Housing Architect, 23 Beckford Street, Hamilton, Lanarkshire; 39 Woodland Avenue, Paisley, Renfrewshire. William McCrea, T. S. Cordiner, L. W. Hutson.

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Whitfield: Cyril George, B.Arch. (L'pool) (Liverpool Sch. of Arch.: Univ. of Liverpool), 18 Avondale Road, Liverpool, 15. Prof. R. Gardner-Medwin, Prof. Gordon Stephenson, B. A. Miller.

Wickham Robinson: Alan Thomas, Dipl.Arch. (Leeds) (Leeds Sch. of Arch.), 16 Pannal Avenue, Pannal, Harrogate. F. Chippindale, D. A. Fowler, John Hardwick.

Wilcox: John Herbert, [Final], 19 Palm Road, Maybush, Southampton. A. C. Townsend, Colonel R. F. Gutteridge, J. B. Brandt.

Williams: Peter Ensor, [Final], 163 Richmond Road, Kingston-upon-Thames, Surrey. Dr. J. L. Martin, J. Holman, J. Berger.

Williams: Simon Dinham Lewis, [Final], 210 Hainault Road, Leytonstone, E.11. Norman Keep, Kenneth Anns, Edwin Rice.

Willoughby-Thomas: Mervyn Bryce, [Final], 66 Station Road, Harrow, Middlesex. Arthur Korn, Edwin Rice, Paul Nightingale.

Wilson: Robert, D.A. (Glas.) (Glasgow Sch. of Arch.), 5 Queensborough Gardens, Glasgow, W.2. William McCrea, Alexander Wright, T. J. Beveridge.

Winter: Peter Pask, Dipl.Arch. (U.C.L.) (Bartlett Sch. of Arch.: Univ. of London), 8a Hayne Road, Beckenham, Kent. Prof. H. O. Corfiato, R. C. White-Cooper, S. Hyde.

Wood: Kenneth Brian, [Special Final], 58 Mount Road, Chessington, Surrey. F. Q. Farmer, J. S. Walkden, Frank Risdon.

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Woodhams: Leonard, [Special Final], 32 Pen Close, Cherry Hinton, Cambridge. Eric Lyons, E. M. K. Ellerton, Frederick Barber.

Woods: David Alan, B.Arch. (L'pool) Liverpool Sch. of Arch.: Univ. of Liverpool), 94 Rosslyn Drive, Moreton, Wirral, Cheshire. Prof. R. Gardner-Medwin, Prof. Gordon Stephenson, B. A. Miller.

Woolfenden: Brian, [Final], 37 Verdun Crescent, Rochdale, Lancs. Cecil Stewart, H. S. G. Eldred, B. L. Moir.

Worboys: Roger, B.A. (Cantab.) (Sch. of Tech. Art and Commerce, Oxford: Sch. of Arch.), 20 Albert Court, S.W.7. Howard Robertson, Prof. Basil Ward, K. D. P. Murray.

Worden: William Dewhurst, B.Arch. (L'pool) (Liverpool Sch. of Arch.: Univ. of Liverpool), 99 Staines Road, Bedfont, Middlesex. Prof. R. Gardner-Medwin, Prof. Gordon Stephenson, B. A. Miller.

Wright: Alec, [Final], 33 Thurleston Avenue, Morden, Surrey. L. R. Bradshaw, R. Gray Bell, F. J. Searles.

Wyatt: Robert John, B.A. (Cantab.) [Final], 7 School Hill, Histon, Cambs. Peter Bicknell, W. P. Dyson, H. C. Hughes.

ELECTION: 6 APRIL 1954

An election of candidates for membership will take place on 6 April 1954. The names and addresses of the overseas candidates, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, R.I.B.A., not later than Saturday 27 March 1954.

The names following the applicant's address are those of his proposers.

AS FELLOWS (3)

Hope: John Leonard, [A 1935], P.W.D., Regional H.Q., Enugu, Eastern Nigeria. Thomas Scott, W. H. Ansell, Rees Phillips.

Kerr: James Aubrey, [A 1922], 56 Young Street, Sydney, N.S,W., Australia. P. J. Gordon, Adrian Ashten, Cobden Parkes.

and the following Licentiate who has passed the qualifying examination:—

Ogilvie: Gordon Cecil Wentworth, Kenwood House, Hardinge Street, Nairobi, Kenya: Cloverdale Farm, Limuru, Kenya. G. B. E. Norburn, S. L. Blackburne, L. G. Jackson.

AS ASSOCIATES (11)

Bierre: Noel William, Dip.Arch. (Auck., N.Z.) (Passed a qualifying Exam. approved by the N.Z.I.A.), 19 Woodside Crescent, St. Heliers Bay, Auckland, New Zealand. Prof. C. R. Knight, Prof. A. C. Light, W. H. Gummer.

Bloomberg: Arnold, Dipl.Arch. (Northern Polytechnic) (Northern Poly. (London): Dept. of Arch.), 21 Holland Grove, Caulfield, S.E.7, Melbourne, Australia. T. E. Scott, S. F. Burley, H. Brambill.

Brawne: Michael (Arch. Assoc. (London): Sch. of Arch.), Albert Farwell Bemis Foundation, Massachusetts Institute of Technology, Cambridge, 39, Mass., U.S.A. Arthur Korn, H. G. Goddard, R. F. Jordan.

Gibson: Reginald Allen Esmond, Dip.Arch. (Auck., N.Z.) (Passed a qualifying Exam. approved by the N.Z.I.A.), Architect's Office,

City Engineer's Dept., Town Hall, Auckland, C.I., New Zealand. Prof. C. R. Knight, Prof. A. C. Light, W. H. Gummer.

Jopling: Victor Thomas, [Special Final], Public Works Department, P.O. Box 81, Causeway, Salisbury, S. Rhodesia. L. F. R. Coote, C. A. Knight, F. A. Jaffray.

Nunan: Robert George Philip, [Final], c/o Public Works Department, El Obeid, Anglo-Egyptian Sudan. Applying for nomination by the Council under Bye-law 3(d).

Rees: John Bowen (Passed a qualifying Exam. approved by the R.A.I.A.), 18 Selwyn Street, Canterbury, Melbourne, Victoria, Australia. Prof. B. B. Lewis, Harry Winbush, Howard Williams.

Sammut: Marcel Ernest Leopold, [Final], 7 Amir Ibrahim, Gezira, Cairo, Egypt. Applying for nomination by the Council under Bye-law 3(d).

Shaw: Ian Bradley, B.Arch. (Auck., N.Z.) (Passed a qualifying Exam. approved by the N.Z.I.A.), c/o 204 Kings Buildings, New Plymouth, New Zealand. Prof. C. R. Knight, Prof. A. C. Light and the President and Hon. Secretary of the N.Z.I.A. under Bye-law 3(a).

Summerhayes: Geoffrey Edwin (Passed a qualifying Exam. approved by the R.A.I.A.), 398 Stirling Highway, Cottesloe, Western Australia. A. J. Hobbs, E. Le B. Henderson, R. Summerhayes.

Wicks: George Preston (Passed a qualifying Exam. approved by the I.S.A.A.), 9-11 Timber Street, Pietermaritzburg, Natal, S. Africa. D. P. Marshall and applying for nomination by the Council under Bye-law 3(d).

Notes and Notices

NOTICES

Third General Meeting, Tuesday 5 January 1954 at 6 p.m. The Third General Meeting of the Session 1953-54 will be held on Tuesday 5 January 1954 at 6 p.m. for the following purposes:—

To read the Minutes of the Second General Meeting held on 8 December 1953; formally to admit new members attending for the first time since their election.

To read the Council's Deed of Award of Prizes and Studentships 1954.

Mr. John Betjeman to read a paper on 'Honour your Forbears'.

(Light refreshments will be provided before the meeting.)

Fourth General Meeting, Tuesday 2 February 1954 at 6 p.m. The Fourth General Meeting of the Session 1953-54 will be held on Tuesday 2 February 1954 at 6 p.m. for the following purposes:—

To read the Minutes of the Third General Meeting held on 5 January 1954.

The President, Mr. Howard Robertson, M.C., A.R.A., S.A.D.G., to deliver an address to architectural students and present the Medals and Prizes 1954.

Mr. Basil Spence, O.B.E., A.R.A., A.R.S.A. [F], to read a criticism of the designs and drawings submitted for the Prizes and Studentships 1954.

Session 1953-54. Minutes II. At the Second General Meeting of the Session 1953-54, held on Tuesday 8 December 1953 at 6.0 p.m.

Mr. Howard Robertson, M.C., A.R.A., S.A.D.G., President, in the Chair.

The meeting was attended by about 320 members and guests.

The Minutes of the Inaugural General Meeting held on Tuesday 3 November 1953 having been published in the JOURNAL, were taken as read, confirmed and signed as correct.

The following members attending for the first time since their election were formally admitted by the President:—

As Fellows: John R. Atkinson, D. H. Beaty-Pownall, The Hon. Lionel G. B. Brett, Gordon Gillman, J. V. Hamilton, Hin Lung Li, Clive

As Associates: J. S. Ager, K. A. Ayton, J. D. Boyle, L. W. Brimley, Miss Margaret Brown, Miss M. F. Caesar, M. T. Cartledge, C. R. Cater, R. V. Clark, E. R. Corbey, D. M. Corder, D. A. Cox, N. T. Davey, G. J. Foxley, Miss P. E. Gibbs, P. A. Golding, M. F. Goodwin, J. A. Gooschalk, J. N. Gunnis, D. J. Heuvel, George Holland, J. F. Hollis, M. B. Hull, M. C. W. James, H. F. Kendall, T. B. Klein, Stanley Lear, A. E. Matcham, Geoffrey Owen, D. G. Parsey, N. V. Pearl, Miss I. J. Richman, R. G. Rogers, W. H. H. Rogers, E. L. Shepherd, B. J. Skinner, D. A. C. Smith, Stanislaw Spielrein, E. F. Stevens, Mrs. Hedy Stevenson, A. M. Taylor, Geoffrey Treadwell, J. W. Wilmot, Miss J. V. Wragg.

As Licentiates: A. I. Richards, W. W. J. Trollope.

Mr. Siegfried Charoux, A.R.A., having read a paper on 'Building Without Grace: An Aggressive Examination', a discussion ensued and on the motion of the Hon. David Astor, seconded by Mr. Howard V. Lobb, C.B.E. [F], a vote of thanks was passed to Mr. Charoux by acclamation, and was briefly responded to.

The proceedings closed at 7.35 p.m.

R.I.B.A. Dinner, Friday 19 February 1954. The R.I.B.A. Dinner in 1954 will be held on Friday 19 February at Grosvenor House, Park Lane, London, W.I. The cost of tickets is 32s. 6d. each, exclusive of wines, cigars, etc. Evening dress with orders and decorations or uniform will be worn.

A form of application is enclosed with this issue of the JOURNAL, and members are asked to send in their applications at the earliest possible moment, accompanied by the necessary remittance, which must be by crossed cheque or money-order, made payable to the Secretary R.I.B.A.

Revision of the R.I.B.A. Scale of Professional Charges. At their meeting on 8 December 1953 the Council approved a number of recommendations of the Practice Committee in regard to an overall revision of the R.I.B.A. Scale of Professional Charges. The booklet is in future to be entitled 'Conditions of Engagement and Scale of Professional Charges' and the revised Conditions and Scale are set out on pp. 68-9 of this JOURNAL. It should be noted that the application of the surcharge on final accounts for fees not exceeding £1,150 will be discontinued from the date on which the revised Scale comes into force.

In accordance with the provisions of Byelaw 38, the Council give notice that the revised Conditions of Engagement and Scale of Professional Charges will be confirmed by them at their meeting on 2 February 1954, subject to the consideration of any comments or

criticisms which may be received from members. Such comments or criticisms are required in accordance with the above-mentioned Byelaw to be submitted within one month (i.e. 30 Jan.) from the date of issue of this JOURNAL.

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British Architects' Conference, Torquay, 26-29 May 1954. The British Architects' Conference in 1954 wil be held at Torquay from 26 to 29 May at the invitation of the Devon and Cornwall Society of Architects, A list of hotels prepared by the Conference Executive Committee is given below and members intending to be present at the Conference are advised to reserve accommodation as soon as possible.

Standardisation of Trade Literature. The attention of the Council has been drawn to the inconvenience caused to members by the diversity in shape and size of printed technical information in the form of catalogues, brochures, leaflets, etc., issued by manufacturers and suppliers of products or services.

At the request of the Royal Institute and of the Ministry of Works, the British Standards Institution published 'British Standard Recommendations on the Sizes and Contents Arrangement for Manufacturers' Trade and Technical Literature (Building Industry)' (B.S. 1311; 1946). The advantage to members for the purpose of handling, indexing and filing of having some uniformity in these publications is obvious, and members are recommended to take every available opportunity of stressing this point to manufacturers and suppliers of materials who may send such literature.

The R.I.B.A. Appointments Department. Members and Students of the R.I.B.A. and the Allied and Associated Societies are reminded that the services of the Institute's Appointments Department are available to employers requiring assistants and to assistants seeking salaried employment.

Employers are invited to notify the Secretary of vacancies in their offices, giving details of the work to be done, the qualifications required, and salaries offered.

Assistants should preferably call at the offices of the Appointments Department, but if this is not practicable they should obtain from the Secretary an application form, which when completed and returned to the Institute will enable the Department either to send the applicants particulars of vacancies suitable to their qualifications and requirements or submit their names for vacant posts.

Members and Students seeking official

British Architects Conference, Torquay, 26 to 29 May 1954.

LIST OF HOTELS

| Hotel | Address | Rooms | | Daily Bed and Breakfast | | Garage | Remarks |
|----------------------------|----------------------------------|--------|--------|-------------------------------|--------|----------------|---|
| | | Single | Double | From | То | | |
| (1) Licensed Hotels. | | | | | | | |
| C Palace Hotel | Babbacombe Road | 54 | 93 | 26/- | 45/- | Yes | The Conference Ban- quet will be held here |
| B Imperial Hotel] | Park Hill Road | 60 | 60 | 35/- | 45/- | Yes | quet will be liefd liefe |
| | Forbay Road | 60 | 80 | 26/- | 32/- | Yes | |
| A Victoria Hotel | Belgrave Road | 21 | 58 | 25/- | - | Adj. | |
| | Sea Front | 37 | 83 | 27/6 | 41/3 | Yes | |
| | Sea Front | 33 | 67 | 17/6 | 19/6 | _ | |
| | Victoria Parade | 14 | 39 | 25/- | 27/6 | | |
| | Daddyhole Plain | 26 | | 21/- | _ | Yes | |
| A Abbey Lawn Hotel | Belgrave Crescent | 15 | 45 | 20/6 | _ | Parking | |
| A Belgrave Hotel | Belgrave Road | 20 | 30 | 25/- | nepus | 3 + Parking | |
| A Rosetor Hotel | Chestnut Avenue | 42 | 39 | 25/6 | | Yes | |
| | Belgrave Road | 13 | 25 | 22/6 | - | | |
| The same account to | | | 1 | | | Parking | |
| C Osborne Hotel | Meadfoot | 45 | 58 | 32/6 | _ | Parking | |
| C Oswald's Hotel | Palermo Road, Babbacombe | 9 | 41 | 18/6 | _ | Yes | |
| (2) Private Hotels—25 ber | frooms and over. | - | | | | | |
| | Warren Road | 7 | 28 | 20/- | _ | _ | |
| | Croft Road | 7 | 22 | - | - | | Full board from 24/- |
| A CIOICON TIOUSE | | | | | | Parking | a day |
| A Chillingworth | Belgrave Road | 8 | 36 | 17/6 | - | Destries | |
| | p. 1 p d | 20 | 27 | 17/6 | ****** | Parking | |
| | Belgrave Road | 14 | 36 | 21/- | _ | Yes | |
| | Belgrave Road Chestnut Avenue | 11 | 17 | 21/- | _ | Yes | Full board from 36/- |
| A Roselea | Chestnut Avenue | 11 | 17 | | | 1 63 | a day |
| A Kistor | Belgrave Road | 8 | 20 | 18/6 | 22/6 | | |
| | Chestnut Avenue | 40 | 50 | 22/- | 25/- | Yes | |
| | The Terrace | 6 | 21 | | - | - | Full board from 25/- |
| | | | | | | Parking | a day |
| A Vernon Court | Warren Road | 15 | 35 | 19/6 | 22/6 | Yes | |
| (3) Smaller Private Hotels | under 25 bedrooms. | | | | | | |
| A Cornerways | Belgrave Road | 6 | 17 | 10/6 | 12/6 | - | |
| | Torwood Gardens | 2 | 13 | 15/6 | - | - | |
| | | | | | | Parking | |
| A Shedden Hall | Shedden Road | 4 | 15 | 17/6 | | Yes | |
| | Belgrave Road | 5 | 6 | 12/6 | - | - | |
| | Belgrave Road | 2 | 10 | 12/6 | | - | |
| C Norcliffe | Babbacombe Downs Road | 2 | 5 | 18/- | - | Yes | |

All the hotels are in Torquay. Those marked 'A' are within ½ mile radius of the Conference Headquarters at Torre Abbey, those marked 'B' within 1 mile radius, and those marked 'C' within 1½ miles radius.

The hotels are a representative selection of various grades and in various parts of the town. There are, of course, many other hotels and boarding houses and complete lists may be obtained from the Secretary, Torquay Hotels Association, Torquay.

In view of the wide range, it has been thought inadvisable to reserve any accommodation, and members wishing to attend the Conference are advised to make their reservations as soon as possible direct with the hotel of their choice, mentioning the purpose of their visit.

appointments should note that normally these are fully advertised in the weekly professional press, and that therefore the Appointments Department do not as a rule notify them to

those on the register.

The Institute will also be glad to advise on most matters concerning architectural employment, including overseas appointments.

Members and Professional Affixes. The Council's attention has been called more than once to the practice, among some members, of adding a string of letters of doubtful value to the affix indicating membership of the Royal Institute on their letter paper.

This is a matter in which the Council ob-

viously cannot dictate to members, and must trust to their good sense. It should be obvious, however, that the affix of a chartered body of high standing is weakened in effect by the addition to it of a string of other mysterious designations some of which probably indicate

no more than the payment of an annual

Classes of Retired Members. Under the provisions of Bye-law 15 applications may be received from those members who are eligible for transfer to the class of 'Retired Fellows', 'Retired Associates' or 'Retired Licentiates'.

The Bye-law is as follows: 'Any Fellow, Associate or Licentiate who has reached the age of 55 and has retired from practice may, subject to the approval of the Council, be transferred without election to the class of "Retired Fellows", "Retired Associates", or "Retired Licentiates", as the case may be, but in such case his interest in, or claim against the property of, the Royal Institute shall cease.

'The amount of the annual subscription payable by such "Retired Fellow", "Retired Associate" or "Retired Licentiate" shall be one guinea, or such amount as may be determined by resolution of the Council, excepting in the case of those who have paid subscriptions as full members for 30 years, and who shall be exempt from further payment. A "Retired Fellow", "Retired Associate" or "Retired Licentiate" shall have the right to use the affix of his class with the word "Retired" after it, shall be entitled to receive the JOURNAL and Kalendar, shall be entitled to the use of the Library, and shall be entitled to the use of the Library, and shall have the right to attend General Meetings, but shall not be entitled to vote. A "Retired Fellow", "Retired Associate" or "Retired Licentiate" shall not engage in any avocation which in the opinion of the Council is inconsistent with that of architecture. Nothing contained in this Bye-law shall affect the rights of persons who at the date of the passing of this Bye-law are members of the classes of "Retired Fellows" and "Retired Members of the Society of Architects"."

COMPETITIONS

Church at Sighthill, Edinburgh. The Church of Scotland Home Board invites architects resident in Scotland to submit designs in com-petition for a church and ancillary buildings for a site at Sighthill, Edinburgh.

Assessors: Professor Robert H. Matthew, C.B.E. [A], Harry Taylor [A], Architect to the Church of Scotland Home Board; The Rev. Professor J. G. Riddell, D.D., Convenor of the Church of Scotland National Church Extension

Premiums: £750, £450, £300, £200, £100. Last day for submitting designs: 30 January

Conditions may be obtained on application

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to the Rev. Ivan F. Tibbs, M.A., The Church of Scotland Offices, 232 St. Vincent Street, Glasgow, C.2. Deposit: £2 2s.

COMPETITION RESULT

Sheffield University

I. Messrs. Gollins, Melvin, Ward and Partners

 Messrs, J. Mansell Jenkinson & Son [F/A].
 Mr. H. T. Seward [F] (Messrs. Cruickshank & Seward).

Specially mentioned: Messrs. S. W. Milburn & Partners [F/AAA], Dr. C. Franck [A], Mr. George Subiotto [A], Mr. A. M. Gear [A].

ALLIED SOCIETIES

Changes of Officers and Addresses

Royal Institute of the Architects of Ireland. President, T. F. Inglis, 87 Merrion Square

South, Dublin, C.17,

Royal Australian Institute of Queensland Chapter. President, J. M. Collin, Albert Hall, Albert Street, Brisbane, Queensland. Hon. Secretary, E. W. N. Crofts, Albert House, King George Square, Brisbane.

Royal Society of Ulster Architects. Annual Dinner. The Royal Society of Ulster Architects held their annual dinner on 3 December at the Grand Central Hotel, Belfast, with Mr. James M. Aitken, M.T.P.I. [A], President of the Society, in the Chair. Among the guests were Mr. Howard Robertson, M.C., A.R.A., S.A.D.G., President of the Royal Institute of British Architects, together with Mrs. Robertson; the Rt. Hon. Dame Dehra Parker, D.B.E., Minister of Health and Local Government for Northern Ireland; the Lord Mayor of Belfast, Alderman Sir Percival Brown, C.B.E.; the Recorder of Belfast, His Honour Judge Fox, Q.C.; Mr. Eoghan D. Buckley, President of the Royal Institute of the Architects of Ireland; and Mr. C. D. Spragg, C.B.E., Secretary R.I.B.A.

After the Loyal Toast, the toast of The Government of Northern Ireland was proposed by Mr. Samuel McIlveen, and the Rt. Hon. Dame Dehra Parker, replying, said that this year nearly sixteen million pounds would have been spent on new building sponsored by her Ministry. Six million pounds of this sumwhich ignored factories, schools and civil engineering projects-consisted of direct Government grants. She said that the most important thing was to keep down costs, and so far as housing was concerned she was glad to say that there was no incompatibility between good design and low cost. Some of the most successful efforts in low-cost housing in Northern Ireland were the result of close and direct co-operation between architect, engineer, quantity surveyor and builder at the design

stage. The Earl of Antrim, who proposed the toast of the R.I.B.A. and the Royal Society of Ulster Architects, said that an enormous improvement had taken place in the standard of architecture in the British Isles in the past thirty years, but he regretted that so many identical houses were built. Mr. Howard Robertson and Mr. James M. Aitken replied. Mr. Robertson said architects were forced to envisage three things in order to achieve their programmes-good design, low cost and speed in construction. He expressed disappointment that there should be a cleavage between traditional and non-traditional building. The non-traditional, if it were successful, soon became traditional.

Mr. Albert Neill [A], Vice-President of the Royal Society of Ulster Architects, proposed the toast of The Guests, and the Lord Mayor,

the Recorder and Mr. Eoghan D. Buckley

Nottingham, Derby and Lincoln Society of Architects, North Lincolnshire Branch, First Annual Dinner. The first annual dinner of the recently formed North Lincolnshire Branch of the Society was held at the Yarborough Hotel, Grimsby, on Friday 27 November, with Mr. J. Fred Pye [L] in the chair. Among those present were the President of the Society, Mr. F. Hamer Crossley [F]; the Vice-Presidents, Mr. W. Caparne Baldry [L], Mr. E. H. Ashburner [F], and Mr. S. F. Barrell [A]; Mr. C. D. Spragg, C.B.E., Secretary R.I.B.A.; and Councillor A. B. Winters, J.P., Mayor of Cleethorpes, together with a number of representative members of other professions.

After the Loyal Toast had been proposed from the chair, the toast of 'The Towns and Trade of North Lincolnshire' was proposed by Mr. G. R. A. Mack [A], and replied to by Councillor A. B. Winters, J.P. The toast of the Nottingham, Derby and Lincoln Society of Architects was proposed by Mr. J. Fred Pye [L], and the President, Mr. F. Hamer Crossley [F], by special request expanded his reply into a short address to the members.

The speeches were interspersed with groups of songs sung by Mr. R. Mellars, and the toast of the Guests was submitted by Mr. J. V. Oldfield [L] to which replies were made by Mr. C. D. Spragg, C.B.E., for the R.I.B.A.; by Mr. W. Caparne Baldry [L] on behalf of the Society's Vice-Presidents; and by Dr. J. T. McCullagh, F.R.C.S., for the representatives of the other professions. The evening proved to be a very enjoyable one.

GENERAL NOTES

A.R.C.U.K. Maintenance Scholarships in Architecture. The Architects' Registration Council of the United Kingdom offer for award in June 1954 certain maintenance scholarships in architecture. The scholarships will consist of a grant for the payment of one-third of the school fees, and, when necessary, a maintenance allowance. The scholarships will be renewable from year to year until the student has finished his or her school training. They will be available for students of British nationality who could not otherwise afford such training to enable them to attend architectural schools approved by the Council. The scholarships will be available both for students who have already begun their training and for students wishing to begin their training. Scholarships will not be granted to students who will be less than 17 years of age on 1 October of the year in which the examination is taken.

Particulars and forms of application may be obtained from the Secretary to the Board of Architectural Education, Architects' Registra-tion Council of the United Kingdom, 68 Portland Place, London, W.1.

Copies of previous years' examination papers

may be obtained on payment of 6d. The closing date for the receipt of applications, duly completed, is 1 February 1954.

Scholarships Tenable at the Massachusetts Institute of Technology, Summer, 1954. The Massachusetts Institute of Technology is offering a small number of scholarships to university graduates in science, technology and architecture to enable them to attend the summer session of the Institute from 6 June to 18 September 1954.

The scholarships are open to both men and women. Candidates must be British citizens under 32 years of age, who have had at least two years' experience in postgraduate research.

They must also prepare a programme of research to carry out at the Institute. Candidates must also (a) be in good health, (b) hold recognised university degrees in technical fields, but applicants may come from either industry or academic circles.

Application forms may be obtained from

Cultural Affairs Officer, Room 302, Grosvenor Square, London, W.1. All application forms must be completed and returned to the Embassy by 4 January 1954.

Royal Society of Arts Bicentenary Competition, Prizes of £250, £100, £50 and ten prizes of £10 each are offered by the Royal Society of Arts for entries in this competition, the subject of which is 'The practical aspects of life on this earth in the year 2,000'. Copies of conditions of competition and entry forms can be obtained from the Secretary, The Royal Society of Arts, John Adam Street, Adelphi, W.C.2, not later than 15 February 1954. An entry fee of one shilling must accompany the application. Actual entries must reach the Society by 30 June. Entries may be in written or visual form (drawings or models) with any necessary explanation in writing. Written entries must not exceed 3,000 words, The competition is open to persons of British nationality and to Fellows and Associates of the Royal Society of Arts of whatever nationality.

Bernard Webb Studentship 1953. The Bernard Webb Studentship for the historical and critical study of architecture, which is open to members of the Architectural Association and tenable under the auspices of the British School at Rome, has been awarded to Mr. Neil Macfadyen [Student], for a study of the relationship of architecture and sculpture, with special reference to 15th and 16th century work in Italy.

The University of Liverpool. Lever Chair of Civic Design. The Council of the University invites applications for the Lever Chair of Civic Design. Further particulars may be obtained from Mr. Stanley Dumbell, Registrar, by whom twelve copies of applications (one in the case of overseas candidates) should be received not later than 30 January 1954.

A.A. Evening Classes in Design. The Council of the Architectural Association wish to offer facilities for evening classes in design to students who have passed the R.I.B.A. Intermediate Examination, and who are not attending at any school of architecture. The classes are not intended as a preparation for the R.I.B.A. Finals, but are to provide opportunities for discussion and criticism of students'

The course will be staffed on an honorary basis. No charge will be made for tuition, but students will be required to pay a termly registration fee of 10s. 6d. Details can be obtained from the Principal's Administrative Assistant, 34/36 Bedford Square, W.C.1.

R.I.B.A. Cricket Club. The R.I.B.A. Cricket Club held its Annual General Meeting and Dinner at the Architectural Association on 20 November. It was a well-attended meeting and by far the most successful dinner so far held. The meeting approved a formal con-stitution for the club and Mr. P. W. Adams [F] was elected as the club's new President, If J was elected as the club's new President, in succession to the late Mr. C. H. James, R.A. [F]. Mr. Thomas E. Scott, C.B.E. [F], and Mr. S. B. Caulfield [F], were elected Vice-Presidents and Mr. E. O'Shaughnessy was elected as Honorary Member.

Other officers of the club were re-elected as follows: Club Captain—C. A. R. Norton.

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DECEM

Committee—D. S. Taylor, R. R. Fairbairn, B. S. Smyth, F. G. Cooper. B. S. Smyth was re-appointed Vice-Captain and also Honorary Secretary and Treasurer. W. W. Atkinson was appointed Honorary Auditor.

Caps were awarded for the 1953 season to:

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C. A. R. Norton, B. S. Smyth, D. S. Taylor, J. K. Hawkes, P. Bynoe, J. G. Batty, R. R. Fairbairn, F. G. Cooper, G. R. Linfield, D. Le M. Brock, W. W. Atkinson, H. E. Francis.

The club had quite a successful season. Five games were played and one game not played owing to rain; three games were won. The following six games are likely to be played again in the 1954 season—versus The Vitruvians, The Architectural Association, the London Master Builders' Association, the Blue Circle Cricket Club, The Royal Institution of Chartered Surveyors, and a Club Cricket Conference XI.

Mr. P. W. Adams presided at the dinner. Guests of the club included: T. E. Scott, C.B.E. [F], C. D. Spragg, C.B.E., Secretary R.I.B.A., E. L. Bird, M.B.E., M.C., Editor R.I.B.A. JOURNAL; H. J. W. Alexander, Secretary, Architectural Association; and C. S. Davies, representing Club Cricket Conference.

the arbitrator's initial expenses by a revision of the undertaking on the form of application for the appointment of an arbitrator, which will in future read as follows: 'I/We jointly and severally agree to provide adequate security for the due payment of any fees, costs and expenses of the Arbitrator in connection with this application and the Arbitration and to take up the Award within ten days from receipt of notice of publication.

13. R.I.B.A. Form of Agreement for General Use between a Building Owner and a Firm of Architects. The Council approved a recommendation of the Practice Committee that the Form of Agreement for general use between a Building Owner and a Firm of Architects should be published in two editions, one applicable to a building owner other than a statutory authority and the second applicable to a building owner who is a statutory authority.

14. Membership. The following members were elected: as Honorary Corresponding Members 1; as Fellows 14; as Associates 118; as Licentiates 6.

15. Students. 121 Probationers were elected as

16. Applications for Election. Applications for election were approved as follows: *Election 2 February* 1954, as Honorary Fellows 1; as Honorary Associates 3; as Fellows 9; as Associates 304. Election 6 April 1954 (Overseas Candidates), as Fellows 3; as Associates 11 17. Applications for Reinstatement. The following applications were approved: as Fellow

Leonard Rome Guthrie; as Associate-Mrs. Ethna Devaney. 18. Resignations. The following resignations were accepted with regret: Mrs. Rene Mar-

guerite Lowcay [A], Thomas Dinning Spence [A], Percival Edward Titley [L], Henry A. Buck [Retd. A], George Tolley [Retd. L]. 19. Applications for Transfer to Retired Mem-

bers' Class under Bye-Law 15. The following applications were approved: as Retired Assoapplications were approved: as Retired Associates—Walter Brand, Walter Ingham; as Retired Licentiates—Lionel Jack Redgrave Cripps, Charles Greenwood, Hugh Roberts, Arthur Young.

Arthur Young.

20. Obituary. The Secretary reported with regret the death of the following members: Philip Waddington Hubbard [F], William Milburn [F], Francis Winton Newman [F], Ernest George [F], Francis Winton Newman [F], Ernest George [F], Francis Winton Newman [F], Ernest George William Souster [F], Robert William Stoddart [F], Charles Whitby [F], Arthur Eric Wiseman [F], Ernest Bates [Retd. F], Percival Bown [Retd. F], John Francis Groves [Retd. F], William Thomas Sadler [Retd. F], Richard Strachan De Renzy Harman [A], Edward Roe Brown [L], Christopher Croft [L], Marshall Harvey [L], Alexander Robert Meldrum [L], Augustus George Millns [L], Harold Frank Penty [L], James Henry Wallace [L], Herbert Charles Clark [Retd. L], Leslie Elliott Williamson [Retd. L], Miss Patricia A. Nicol [Student].

Notes from the Minutes of the Council

MEETING HELD 8 DECEMBER 1953

1. Appointments.—(A) Ministry of Housing and Local Government Housing Medals 1954. By arrangement with the Ministry, the following members were appointed as Chairmen of the Regional Awards Committees: No. 1—Northern, C. W. C. Needham [F]; No. 2—E. & W. Ridings, Noel Pyman [F]; No. 3—North Midland, Stephen Welsh [F]; No. 4—Eastern, E. C. R. Sandon [4]; No. 5—London, Sir Chesles Med. [4]; No. 5—London, Sir Chesles Med Charles Mole [F]; No. 6—Southern—R. F. Gutteridge [F]; No. 7—South Western, Robert Potter [F]; No. 8—Wales, C. F. Bates [F]; No. 9—Midland, A. G. Sheppard Fidler [F]; No. 10—North Western, G. Grenfeller [F]; No. 10—North Western, G. Grenfelle fell Baines [A]; No. 12-South Eastern, R. W. Paine [A].

The following architect members of the London Regional Awards Committee were also appointed: G. A. Jellicoe [F], Miss J. G. Ledeboer [F], Peter Shepheard [A]. (B) R.I.B.A. Representatives on B.S.I. Committees. STB/-: Natural Stone and Quarry Products Industry Standards Committee, B/80: Lintels and Copings, B/80/3: Natural Stone Sills and Lintels—H. E. D. Adamson [A]; HIB/-: Hardware and Ironmongery Industry Standards Committee, HIB/12: Metal Windows and Doors, HIB/12/1: Metal Finishes, dards Committee, H1B/12: Metal Windows and Doors, H1B/12/1: Metal Finishes, H1B/12/2: Aluminium Alloy Windows—Lister P. Rees [A], in place of T. Bilbow [F] and F. R. Pite [A].

2. The Honorary Fellowship. The Right Hon. The Earl of Halifax, K.G., has accepted the Council's nomination for election as an

Honorary Fellow.

3. The Honorary Associateship. Professor J. F. Baker, Mrs. M. A. Montgomery and Sir Arthur Trueman have accepted the Council's nomina-

tion for election as Honorary Associates.
4. Sessional Paper, 2 March 1954. Arrangements have been made for a paper entitled English Villas and Venetian Decorators' to be given by Mr. F. J. B. Watson, F.S.A., Deputy Keeper of the Wallace Collection, in place of the paper previously announced to be given by Professor Charles Madge, who was unable

to accept this engagement.

5. British Architects' Conference 1955. The Council accepted a formal invitation from the West Yorkshire Society of Architects to hold the British Architects' Conference at Harrogate in 1955, and expressed their cordial appreciation of this invitation.

Architectural Education Joint Committee. The Chairman of the Board of Architectural Education reported that an Interim Report of the Architectural Education Joint Committee had been considered, and submitted a recommendation that the principle that all candidates for the Associateship, R.I.B.A., should be required to pass examinations in uniform ed as lists of subjects be reaffirmed. He reported that

the Board had considered lists of subjects put forward by the Joint Committee and had instructed them to make certain amendments and to arrange for the preparation of detailed syllabuses and prototype examination papers. The Council took note of this report and gave approval to the recommendation.

7. R.I.B.A. Scale of Professional Charges. On the recommendation of the Practice Committee, the Council approved a comprehensive revision of the R.I.B.A. Scale of Professional Charges to be known in future as the 'Conditions of Engagement and Scale of Professional Charges and authorised the publication of the revised draft scale for comment by the general body of members prior to formal confirmation of the scale.

8. Standardisation of Trade Literature. On the recommendation of the Science Committee, it was agreed to draw the attention of members to the advantages of standardised sizes, shape and layout of technical trade literature and to advise members to press manufacturers and suppliers of building materials who submitted

brochures, pamphlets, etc., to adopt the recommendations made by the British Standards Institution in B.S. 1311: 1946.

9. Report of the Ad hoc Committee on Private Architectural Practice by Unqualified Persons. The Council completed their study of the report on Private Architectural Practice by Unqualified. on Private Architectural Practice by Unqualified Persons and considered a number of observations made on matters in the report by various standing Committees of the Institute. It was agreed to publish the report in the R.I.B.A. JOURNAL for the information of members, and approval was given to the implementation of a number of recommendations made by the Committee.

10. Northern Architectural Association: Amendments to Rules. Formal approval was given to a number of amendments to the rules of the Northern Architectural Association, designed to bring the rules into line with the R.I.B.A. year in regard to dates of meetings, presentation of accounts, etc.

11. The late Sir Banister Fletcher: Master's Badge of the Carpenters' Company, Among the personal bequests to the Royal Institute made by the late Sir Banister Fletcher was his badge as Master of the Carpenters' Company. The Council agreed to offer the badge to the Company for use by future Carpenters' Masters.

12. Form of Application for the Appointment of an Arbitrator. The Council's attention was drawn by the Practice Committee to the inconvenience caused to members appointed as arbitrators by the immediate settlement of the dispute between the parties while the preliminaries for the arbitration were in progress. On the Committee's recommendation, it was agreed to make provision for the settlement of

Obituaries

Ernest George William Souster [F] died on 13 November 1953, agad 71.

Mr. Souster was articled to Mr. William Mr. Souster was articled to Mr. William Hull, of Northampton, and started in private practice in 1918. He practised throughout his career in London. In 1922 he joined with Mr. Edmund Howard, F.R.I.C.S., in partnership under the name of 'Howard and Souster'. In 1948 Mr. Richard R. Fairbairn, M.C. [A] joined the partnership, which is today known as 'Howard, Souster & Fairbairn'. Between 1948 and March 1953 Mr. A. Horace Watkins [L] and Mr. Reginald E. H. Croft [L] were

also of the partnership.

Mr. Souster specialised in office and industrial buildings, the latter consisting mainly of buildings for the motor-car and aircraft industries. Among his best-known office buildings are Haddon House, Fenchurch Street; Walsingham House, Seething Lane; 58 Pall Mall; 295 Regent Street; Waterloo Bridge House; Horseferry House, Millbank; Hobart House, Grosvenor Place; 20-22 Berkeley Square and Lambeth Bridge House. His industrial buildings include the Vauxhall motor works, Luton; a factory for Frigidaire Ltd. at Hendon; engine factories at Coventry and Ryton for Messrs. Rootes Ltd., together with an airframe factory at Speke, showrooms and service station at Maidstone and test houses at Park Royal and Ryton for the same firm; film studios at Elstree for the British Dominion Film Company and a factory at Edgware for Messrs. Boosey & Hawkes Ltd.

Mr. Souster was the author of The Design of Factory and Industrial Buildings, published in 1919, and also of various articles in the

technical press.

Francis Winton Newman [F] died on 17 November, aged 75.

Mr. Newman was the son of Samuel James Newman [F], with whom he served his articles. He afterwards became assistant to Walter Millard and then Chief Assistant to Ernest Newton, R.A. He was Ashpitel Prizeman 1903 and Arthur Cates Prizeman 1905. He became an Associate in 1904 and a Fellow in 1912. He set up in personal practice in 1907, in partnership with H. V. Ashley [F]. This partnership lasted until Mr. Newman's retirement in 1945. For a short time, about 1938 or 1939, Mr. W. Naseby Adams also joined the partnership. Mr. Newman served on the Council of the Architectural Association for twenty years and was President in 1929.

His principal works, carried out jointly with Mr. H. V. Ashley, were art galleries for the City of Birmingham and Birmingham Technical College; extensions to the Royal Free and other London hospitals; housing schemes for the boroughs of Marylebone, Westminster, St. Pancras, Deptford and Watford; various banking and municipal buildings; and the Masonic Peace Memorial Building in London—Mr. Newman was Grand Super-intendent of Works of the United Grand Lodge

of England.

Mr. Newman served on a number of R.I.B.A. committees, including the Science and Competitions committees. He also served on the Architects' Registration Council and was an examiner for the R.I.B.A.

In the first world war he held commissions in the R.N.V.R., the R.N.A.S. and the R.A.F., in 1918 becoming a staff officer, R.A.F., with

the rank of Major.
Mr. W. H. Ansell, M.C., F.S.A., Past

President, writes:
'The death of Winton Newman reduces still further the little group of architects, sculptors and painters who for many years between the two wars lunched together almost daily in Holborn or Red Lion Square; Godfrey Pinkerton, Harry Fletcher, Ashley, Noel Rooke, and now Newman.

'Fifty years ago, when pen drawing was more in fashion than it is today, the architectural room at every Royal Academy exhibition was enriched by the delightful drawings of Geoffrey Lucas, Winton Newman, Robert Atkinson and Curtis Green. It is to be feared that these perspectives sometimes gave an undeserved distinction to designs which had otherwise but little claim to it, a state of things not entirely unknown even today.

'It is unnecessary to attempt to divide the responsibility of the partners in the firm of Ashley and Newman for the work they did and the competitions they won, but there can be no doubt but that Newman's beautiful drawings combined with inspired and yet eminently practical planning contributed greatly to the firm's success.

'He was an untiring worker. To see him attacking a great half-inch detail with versatility and zest was a lesson in decision and efficient mastery of a working drawing which few

architects could equal.

I was with him on his first visit to Italy, to Verona and Mantua and Vicenza. Sitting with me in the amphitheatre at Verona he expressed his regret that he had not earlier in his career seen the actual buildings he knew so well in photographs and drawings. He envied those men who had been able to spend a couple of years at the British School at Rome.

'In the 1914-18 war he served in the Royal Naval Air Service and the R.A.F. and spent

long periods at Scapa Flow.

'I have memories of roaming through Norfolk with him in his early Citroën car looking at East Anglian churches, playing golf with him (he had the fastest backswing I have ever seen on any course), singing with him the gendarmes' duet from Offenbach's Geneviève de Brabant, and visiting him in London Hospital after his hip operation.

'In all these Winton Newman remained the same cheerful and gallant personality. His native modesty hid many of his qualities from those who only knew him superficially, but his friendship, loyal and true as it was, was valued by all who were fortunate enough to gain it."

Mr. George Vey [F] adds the following: I feel I must pay a tribute to the late Winton Newman. I was associated with him and his partner, Henry V. Ashley, for nearly 25 years, that is for the whole period between the two world wars.

'I can, therefore, claim to have a close acquaintance with his quiet, unassuming character and the skill with which he was able to tackle and solve large and complicated

architectural problems.

'Many of the older generation of architects will remember him as a brilliant student at the Royal Academy Schools and one time Chief Assistant to Ernest Newton, R.A. He was a magnificent and extremely rapid draughtsman."

Philip Waddington Hubbard [F] died on 12 November after only six days of illness. He was 60 years of age.

Mr. Kenneth Cross [F] writes:

Philip Hubbard was the only son of the late George Hubbard, F.S.A., Fellow and sometime Vice-President R.I.B.A. He was educated at Malvern College and Trinity College, Cambridge, and after taking his degree he went into Messrs. Richardson and Gill's office as a pupil. During the first world war he served in France with the East Surrey Regiment and was three times wounded. In 1917 he was taken into partnership by his father and the firm consisted of George Hubbard, William C. Symes, F.R.I.C.S. [F], and Philip Hubbard. In 1920 he became an Associate and he played an active part in the general practice carried on by the firm. Their work included Stuart House, Cambridge, and the Cambridge and numerous other war memorials, country houses, and business premises.

'After the death of George Hubbard in 1936 William C. Symes and Philip Hubbard carried on a busy and happy partnership together. Like his father, Philip Hubbard was an acute observer of form and proportion and the least important of mouldings would receive great care and attention. Both father and son were connoisseurs and collectors of 18th-century furniture, and in building they both went to the 18th century for guidance in all matters where shape, colour and texture were in question. The buildings which Philip Hubbard designed, such as his laboratory at Malvern College, to which school he was architect, his small houses in the Home Counties and his commercial work, were simple, sensitive andlike himself-unaffected. He was also architect to St. Bartholomew's Hospital. He served on the Council 1925-27 and on the Literature, Practice and Science Committees and the Unification Committee.

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Philip Hubbard was a gay companion and a loyal friend; during the forty years that I knew him I do not think that I ever experienced anything but kindness and cordiality from him. When we last met, two days before he was stricken down, we drank a glass of "sherry white wine" together, for that, it seems, was the name for it two hundred years ago."

Anthony Charles Tripe [F] died on 30 October 1953, aged 45.

Mr. Tripe was born in Wellington, New Zealand, served his articles with Messrs. Crichton & Houghton [FF], Wellington, then came to England in 1929 to complete his studies at the Architectural Association School of Architecture. He became an Associate in

1934 and a Fellow in 1949.

Mr. Tripe's principal works are: extensions to British Lion Studios, Shepperton, and to Metro-Goldwyn-Mayer studios, Boreham Wood; power stations at Antwerp, Kingston (Jamaica), Baghdad, Bahrein and Sydney (Australia); the internal planning and lay-out of a new departmental store for Messrs. E. Mayes & Son Ltd., of Southampton (in conjunction with Col. R. F. Gutteridge, T.D. [F]); and, in partnership with Mr. P. O. G. Wakeham, O.B.E. [A], the rehabilitation of various existing airfields and the construction of five new bomber airfields and one air station for the U.S.A.A.F., and various buildings for the State of Kuwait, including elementary and nursery schools, a technical college and a central kitchen.

W. Wylton Todd [F] writes:—

'Anthony Charles Tripe, whether in the profession of architecture or socially, had the Reger great quality of giving his undivided interest to any problem presented to him. With his Mr. I forceful personality, his dynamic energy, his clear, keen and perfectly ordered mind, Tony and soared to the top of his profession.

block 'From my first meeting with him in 1929 when he arrived from New Zealand, I realised ment a clos

that life to Tony was-architecture. 'There are some men who are determined to surmount any obstacles. Tony was such a man techni He enjoyed, apart from the great esteem of hi nostal clients, immense popularity with his contractors, having no qualms in administering my lo stinging rebuke when justified and almos immediately afterwards enjoying a joke, but never relaxing his authority. As a raconteu Augu his prowess was well known. His criticism were always worth hearing because his basis were always worth hearing occause his day before standards were so high, yet his charity and kindness were as deep as his sense of justice Quality and efficiency were the two great dominating essentials in everything he carried sum of the property of the out, and these essentials pervaded his even of us interest in life.

'After receiving his degree Tony joined Gorey Wornum [F] who, with his great interest and friendship, did much to further Tony brilliant career. As Associate Architect won the competition for a large housing Gobel

scheme in Birmingham.

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'As would be expected, he served with distinction in the R.N.V.R. during the war years and attained the rank of Lieutenant-

Commander.

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'Subsequently he was associated with Messrs. Guy Morgan & Partners [F], and he then set up in practice on his own account in 1947, and up in practice on his own account in 1947, and in 1951 entered into partnership with Mr. P. O. G. Wakeham [4]. This association proved a most successful partnership, with large projects being carried out in England, Belgium, Kuwait, the West Indies and Australia. The works included such varied projects as stadiums, film studios, schools, department stores, housing schemes, hotels. department stores, housing schemes, hotels

and power stations.

'Tony travelled extensively and included in his many interests an enthusiastic love of sport. Whether playing soccer, cricket or golf, again he made many lifelong friends in this

sphere.
'His death has cut short, at the age of 45 years, the life of an architect with a brilliant future who, besides being a master of his craft, had a sincere knowledge and understanding of his fellow men.

William Soye Backhouse [L] died on 15 May 1953, aged 62.

Mr. Backhouse trained with a firm in Leeds, and conducted his practice from 1921 onwards in that city. He was in partnership with Messrs. C. C. Chadwick and W. Watson until their retirement, and from 1929 onwards with Mr. reham A. Drake until Mr. Drake's retirement in 1945. From then on Mr. Backhouse carried on alone with the practice under the name of Chadwick, Watson & Co.

The firm's chief interest was in cinemas, and among those for which Mr. Backhouse was personally responsible are the Regent in Plymouth, the Roxy in Edinburgh, the Scala (now the Gaumont) in Harrogate and the New in Ilkley. He also built a number of factories. The practice has now been wound up.

cluding Robert Alexander Reid [Retd. A] died on chnical 14 September 1953, aged 86.

Mr. Reid was articled to the late Henry Saxon Snell in 1885, and was a student at the Royal Academy School of Architecture and at the ad the nad the Regent Street Polytechnic. He started in per-interest sonal practice in 1918, in partnership with his Mr. H. W. Dodge. Mr. Reid's principal works were a housing estate at Brentford, Hanwell and Brentford hospitals, and a maternity block, nurses' home, X-ray and electrical treatment wards for the West Middlesex Hospital.

Mr. Alexander Young, F.R.I.C.S. [Retd. A], a close friend of Mr. Reid from student days, a man technic trip to France which is of more than

n of his nostalgic interest. He writes:

s con 'I recall, from one of the happiest chapters of tering my long life, how my old friend Bob Reid was almost one of our party of building students of the Regent Street Polytechnic who visited Paris in conteul August 1889 to see the Exhibition celebratiticism ing the French Revolution a hundred years is basi before.

ity and 'It was the Polytechnic's first essay at tours justice abroad, and it was thoroughly well managed or great and all of us enjoyed every hour. For the token carrie sum of £3 17s. Paris was ours, and the twenty of us had the week of our lives. We had an empty private mansion at the back of the opera House, staffed and furnished for the use intere of the weekly parties. On alternate days our Tony coaches picked us up for sight-seeing conducted teet hours of Paris and its surroundings. The housin Gobelins showed us their weaving, the potters of Versailles their ceramics and the city engineers their wondrous sewers. From such

depths we ascended to the top of the Eiffel Tower. It had only just been erected and was the sensation of the time. I remember that we climbed the first 500 feet by the stairs, to observe the construction. The wonderful exhibition itself, only surpassed by that of 1900, took up any time we had left.'

Victor Evans Bosher, A.R.I.C.S. [Retd. A], died on 8 August 1952, aged 80.

Mr. Bosher entered the service of the London County Council in 1899 as a technical assistant and retired in October 1937 with the rank of Principal Assistant (now Architect, Grade I). On that occasion Mr. Bosher, who was a keen yachtsman, was presented with a pair of binoculars by his colleagues.

Mr. C. D. Barnard [A], Assistant Senior Architect with the L.C.C., says of him:

'To write adequately of Bosher is no light task, for he was a man of many parts. The most exacting architectural problem could never impair his ready Irish wit. Away from the board his activities and interests were boundless. He was a great swimmer, a pioneer motorist, an inveterate reader, a crossword enthusiast and an artist of no mean ability. His great love was France (he married a French lady) and at every opportunity he would quietly slip across to his self-styled "second home". Yes! Bosher certainly delighted in living but he was withal a man of deep understanding and purpose, a colleague to be long remembered.'

Habib J. A. Somjee, A.M.T.P.I. [F], died on 28 August 1953, aged 47.

Mr. Somjee was born in Bombay and attended the Bharda New High School there and Bombay University, where he took the degrees of LL.B. and M.A. He obtained the diploma of architecture of the Sir J. J. School of Art in 1931 and then came to England, to University College, London, for further studies. Mr. Somjee became an Associate in 1936, and in that year went as senior assistant to Mr. J. Leed [F] of Oxford. He then went to the London County Council until 1937, when the death of his father necessitated his return

to Bombay.
In 1942 Mr. Somjee joined the Punjab
Government as assistant to the Provincial Town Planner at Lahore. In 1946 he was appointed Town Planner to the Improvement Trust, Punjab, and Public Works Department, Lahore. At the time of partition he became Chief Consulting Architect, Engineer, Surveyor and Town Planner to the Punjab Government. Most of the government buildings constructed in Punjab after partition owed their design to him, some of the more important being the Nishter Medical College and hospital, the pre-cadet college Hasam Abdal, government colleges at Montgomery and Sargodha and seven new district hospitals. He also designed Peshawar University, Government House at Murree and the mosque in Government House in Lahore, Rasool power station and the Punjab Rest House in Karachi.

Mr. Somjee became a Fellow in 1947, and in 1934 was an R.I.B.A. Examiner.

Charles Whitby [F] died on 17 November 1953, aged 69.

Mr. Whitby studied at the Architectural Association School of Architecture and served his articles with Messrs. Mileham & Crickmer [FF] of Gray's Inn and later was assistant to

Mr. O. P. Milne [F].

Mr. Whitby spent most of his career with the Ministry of Works, going to them in 1912, retiring in 1946, and subsequently returning to them on a temporary basis after his retirement. In addition to his official work the chief

buildings with which his name is associated are houses in Epsom and neighbourhood, the Robert Whyte Memorial Hall, Bromley, houses at Gidea Park, Essex (in conjunction with Mr. A. T. Phillips [A] and Mr. W. J. Palmer-Jones [F]), and houses at Oxted and bungalows at Ashtead in conjunction with Mr.

W. G. L. Cheriton, O.B.E. [F].

During the first world war Mr. Whitby served in the Artists' Rifles and in the Royal Engineers as a lieutenant.

In his spare time Mr. Whitby was a painter

in water colours.

Septimus Warwick, a former Fellow of the Institute who resigned in 1949, died recently. Mr. H. Austen Hall [F] says: 'The death of Septimus Warwick ends a friendship of 50 years, during ten years of which we were in partnership. We were enthusiastic competition hands and Septimus excelled in his good planning and fine draughtsmanship and soon obtained the success he deserved. . . . After his early town halls and other successes Warwick went to Canada for seven years and did some interesting domestic work in the district around Montreal. Returning to London in 1920 he quickly developed a large practice, of which the principal buildings are the Wellcome Foundation in Euston Road, Canada House and the Sun Life of Canada building. These buildings are all soundly planned and contain some good rooms, particularly Canada House, in which the detail was cleverly attuned to the Decimus Burton tradition of the building.

'Septimus was a friendly person who enjoyed life enormously and could always give full value in any companionship. He had many friends and never lost the zest of life. He was gay and kind and loyal, and a wonderful partner and

friend to me.

Members' Column

This column is reserved for notices of changes of address, partnership and partnerships vacant or wanted practices for sale or wanted, office accommodation, and personal notices other than of posts wanted as salaried assistants for which the Institute's Employment Register is maintained.

APPOINTMENTS

Mr. Ray Lennox Brewster [A] has taken up an appointment as Senior Assistant Architect with the East African Railways and Harbours Administration. His address is c/o The Railway Architect, P.O. Box 79, Nairobi.

Mr. Reginald Chatterton [A] has taken up an appointment as Chief Assistant Architect to Littlewoods Mail Order Stores Ltd., and he will be pleased to receive trade catalogues at 152a London Road, Liverpool 3.

Mr. S. M. Holloway [A] has been appointed County Architect for Huntingdonshire. His address is County Architect's Department, County Buildings, Huntingdon. (Huntingdon 164.)

Mr. James F. McLean [A] has resigned his position with the British-American Tobacco Co. Ltd., and has taken up an appointment with the Public Works Department, Gold Coast Government, Accra.

Mr. David Percival, M.T.P.I. [A], has been appointed Deputy City Architect and Planning

Officer of Coventry and his address will be Bull Yard, Coventry

Mr. W. A. Ross, C.B.E. [F], is retiring at the end of the year from the Ministry of Works, Scottish Headquarters, 122 George Street, Edinburgh 2, and is being succeeded by the Superintending Architect, Mr. J. E. R. G.

Mr. E. T. Ashley Smith [F], at present Deputy County Architect of Lancashire, has been appointed County Architect of Kent with effect from April 1954, in succession to Mr. S. H. Loweth, F.S.A. [F], who is retiring. His address will be Springfield, Maidstone, Kent.

PRACTICES AND PARTNERSHIPS

Mr. Oliver Carey [A] has relinquished his appointment with the Stevenage Development Corporation and has opened a practice at Meadow Cottage, Wallington, Baldock, Hertfordshire (Broadfield 235), where he will be pleased to receive trade catalogues, etc.

Mr. Alan J. Carruthers [A] has now ceased to be a partner in the Umtali Branch of Macgillivray and Son. Mr. Carruthers will, with immediate effect, practise independently, from P.O. Box 550, Umtali, Southern Rhodesia.

Mr. Edward Craven, A.M.T.P.I. [A], has resigned his appointment as Assistant County Planning Officer to the Lindsey (Lincs.) County Council and is commencing practice on his own account at 185 High Street, Lincoln (Lincoln 10671), and also in Brigg, where he will be pleased to receive trade catalogues, etc. Messrs. James Cubitt and Partners [AA] of London, and Leonard Manasseh and Partners [A] of London, are entering into partnership in Singapore and will practise from there under the style of James Cubitt, Leonard Manasseh and Partners. The two firms will continue to practise in London as hitherto.

Miss Pamela M. Cunnington [A] is now in practice at 53 Great Ormond Street, W.C.1. Miss Jennifer Dennis [A] and Mr. Colin Jones [A] have entered into partnership and will conduct their practice from 'St. Julians', Near Sevenoaks, Kent (Sevenoaks 3221).

Messrs. Richard and Douglas Hall [F/A], Masonic Buildings, Bangor, North Wales, have opened offices at 3a Pride Hill Chambers, Shrewsbury, under the personal direction of their senior partner. They will be pleased to receive trade catalogues at the Shrewsbury address.

Mr. Maurice Hardstaff [A] is resigning his post as Senior Assistant Architect with the Hemel Hempstead Development Corporation and will set up private practice at Hemel Hempstead. His address is 17 Longlands, Adeyfield, Hemel Hempstead, Herts.

Mr. William J. Harvey [A] has commenced practice at 324 Dollis Hill Lane, London N.W.2 (GLAdstone 7355), where he will be pleased to receive trade catalogues, etc. With effect from 1 January 1954, Mr. Richard

Henniker [F], formerly practising at 14 Berkeley Mews, Seymour Street, W.1, is joining Mr. L. A. Culliford, F.R.I.C.S., M.T.P.I. [F], and Mr. L. A. Chackett, F.R.I.C.S. [F], as a partner and amalgamating his practice with theirs. The combined practice will be carried on under the present name and address of L. A. Culliford and Partners, 47 Essex Street,

Strand, W.C.2 (CENtral 9061 and 1316). Mr. T. Henwood Hicks [A] has begun private practice at 65 Lemon Street, Truro, Cornwall (Truro 3764), where he will be pleased to

receive trade catalogues.

Mr. T. N. Holland [A] has entered into partnership and will practise under the style of Turner and Holland at 4 King Street, Wakefield (Wakefield 4267).

Mr. J. Antony Lewis [A] is now in practice at 4 Yeomans Row, Brompton Road, London, S.W.3 (KNIghtsbridge 4610).

Mr. John D. Morgan [A] has opened an office at 17 Conduit Street, London, W.1, where he will be pleased to receive trade catalogues, etc. Mr. David Myles [A], of Bulawayo, Southern Rhodesia, has taken into partnership Mr. Walter Flett Faulds [A] of Lusaka, Northern Rhodesia, and will practise in Northern Rhodesia under the style of Myles and Faulds. The Bulawayo address will remain as before, 110 Fife Street, Bulawayo.

The partnership between Mr. R. Mountford Pigott [F], Mr. M. M. Pigott [A] and Mr. W. E. Barnes [A] has by mutual consent been dissolved. Mr. R. Mountford Pigott and Mr. M. M. Pigott will continue to practise under the same style of R. Mountford Pigott and Partners at 3 Cromwell Place, South Kensington, S.W.7. Mr. W. E. Barnes is now practising from 320 Norton Way South, Letchworth, Herts. (Letchworth 1729), where he will be pleased to receive trade catalogues, etc.

Mr. J. R. Watson [A] has begun practice on his own account at Church House, P.O. Box 12021, Nairobi, Kenya, E. Africa, where he will be pleased to receive trade catalogues, etc.

CHANGES OF ADDRESS

With effect from 12 January 1954 the address of Mr. P. T. Foode [4] will be c/o Town Planning and Housing Department, Georgetown, Penang, Malaya.

The new address of Mr. Eric W. Hoyte [A] is 240 Lyon Street, Ottawa, Canada.

Mr. Laurence King [F] has moved his practice from 37 Gordon Square, W.C.1, to 9 Gower Street, W.C.1, to which address all correspondence should now be sent.

Messrs. Max Lock and Associates (Mr. Max Lock [F], Mr. Geoffrey Easton [A], Mr. Gerald King [A] and Mr. Laurence Perioton [A]) have removed from Headmaster's House, Town Hall Yard, Bedford, to 5a Harpur Street, Bedford, where they will be pleased to receive trade catalogues, etc. Their London address

remains 7 Victoria Square, S.W.1.

Mr. Thomas Meddings [A] and Mr. Norman
Dick [A] have moved to 4/40 Frognal, N.W.3 (HAMpstead 1830), where they will be pleased to receive trade catalogues, technical data, etc. Mr. R. J. P. Murwill [A] has changed his address to Innsbruck, Barton, Icklingham

Road, Cobham, Surrey.

Messrs. S. J. Oldham and Partners [L] have removed from 3 Queen Victoria Road to 63 Queens Road, Coventry.

Mr. Peter Edward Sharp [A] has changed his

Private address to Belair Road, Lynton, Adelaide, South Australia.

Mr. J. M. Smith [F] has removed from 5 Thornham Road, Sale, Cheshire, to 'Little

Tylers', Goughs Lane, Knutsford, Cheshire.

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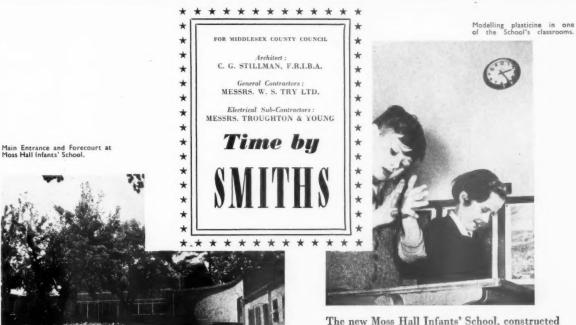
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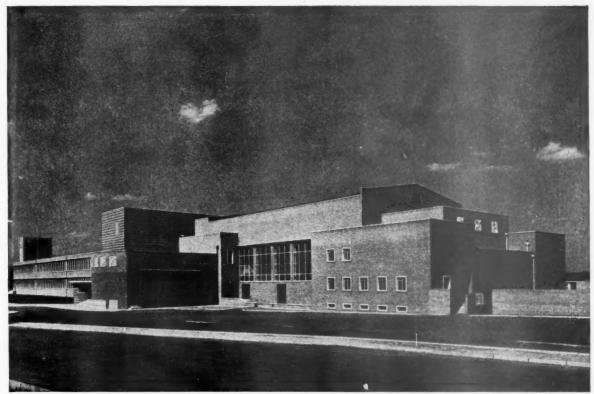
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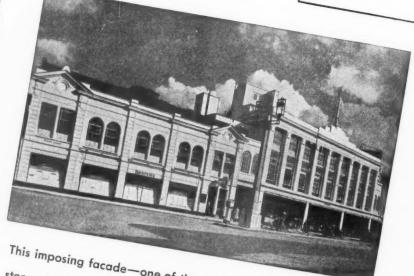
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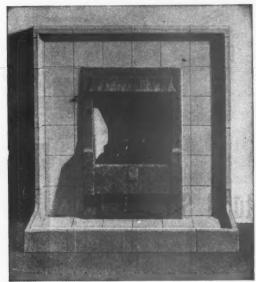
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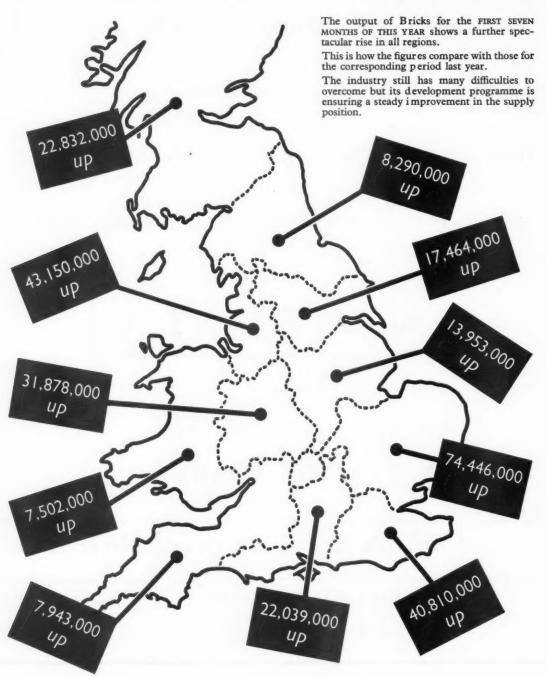
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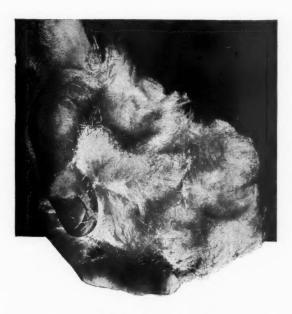
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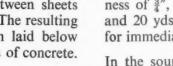


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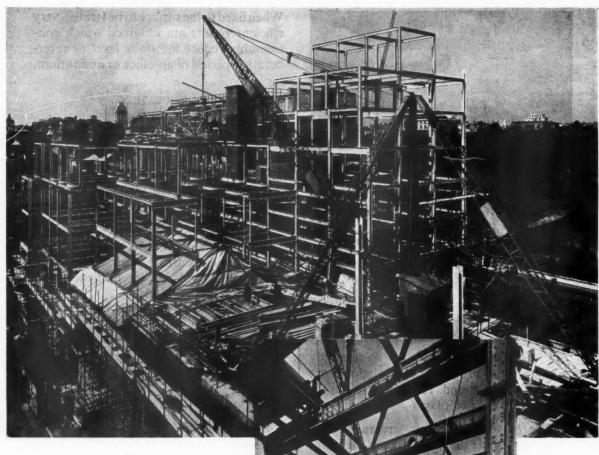
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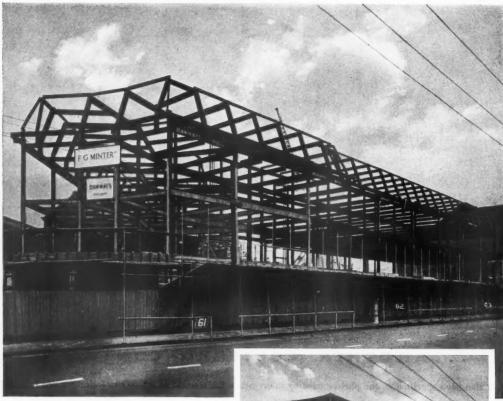


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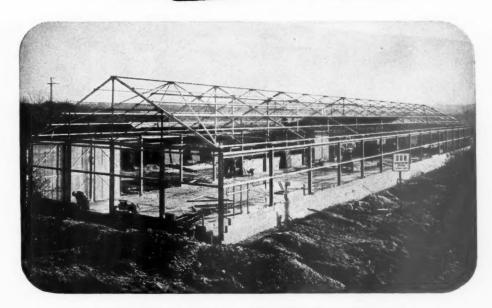
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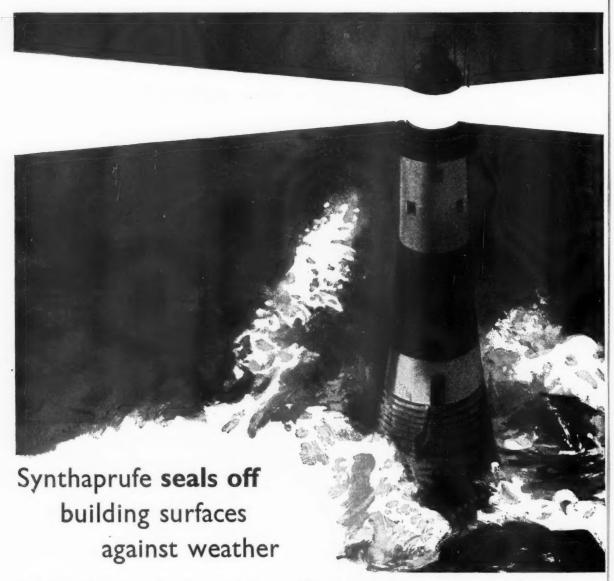
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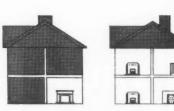
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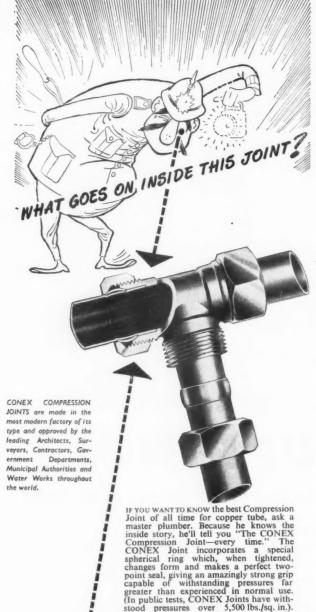
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Building Research Station Digest No. 61

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CORRIGENDA

Building Research Station Digest No. 36 " Sound absorbent treatments."

Page 3, third paragraph, second sentence, should read "Absorbers that are solely cavity resonators are of less interest to the average designer than others, as their use is limited. They can be "tuned" etc. "

Table 1. Column heading for High Frequency, should read 2000 c/s, not 200 c/s.

Table 1. Item No. 21, absorption coefficient at Low Frequency should read .3, not .03.

Building Research Station Digest No. 50 "Emulsion paints."

Page 3, "B.S.1053 Type b" should read "B.S.1053 Type A."

Building Research Station Digest No. 42 "The short bored pile foundation."

Page 3, under ERRATUM, the word "inches" should read "circles."

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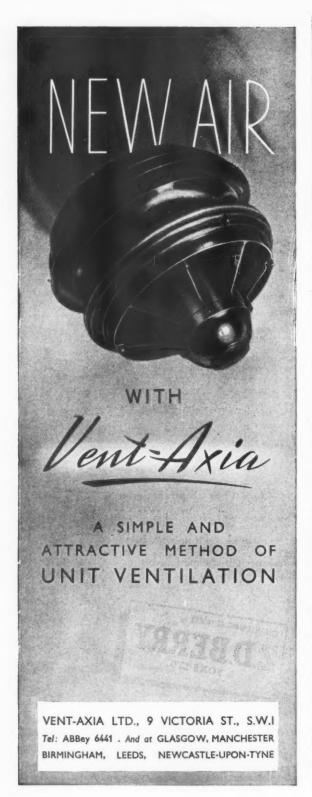
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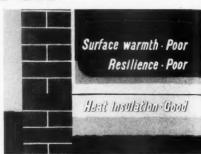
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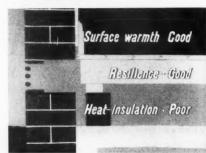
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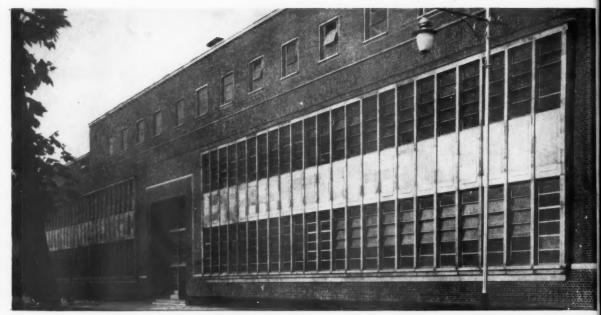
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